

**FOR THE PRESIDENT OF AMCO  
PRODUCTION FOR APPROVAL OF THE  
ROCK LAKE UNIT AGREEMENT.**

CASE No.

5180

---

Application,

Transcripts,

Small Exhibits

ETC.

Unit Name ROCK LAKE UNIT (EXPLORATORY)  
 Operator Amoco Production Company  
 County Iowa

DATE	OCC CASE NO.	5180	EFFECTIVE DATE	TOTAL ACREAGE	STATE	FEDERAL	SEPARATION FEE	SEGREGATION CLAUSE	TERM
APPROVED	OCC ORDER NO.	R-4-47	4-15-74	5,760.00	5,680.00	-0-	80.00	Yes	5 yrs.

Commissioner  
4-15-74

Commission  
3-15-74

UNIT AREA

TOWNSHIP 22 SOUTH, RANGE 35 EAST, NMPM

Sections 20 through 22: All  
 Sections 27 through 29: All  
 Sections 32 through 34: All

**TERMINATED**  
 EM: 3-20-76

Unit Name ROCK LAKE UNIT (EXPLORATORY)  
Operator AMOCO PRODUCTION COMPANY  
County LEA

STATE TRACT NO.	LEASE NO.	INSTI- TUTION	SEC.	TWP.	RGE.	SUBSECTION	RATIFIED		ACREAGE NOT RATIFIED	LESSEE
							DATE	ACRES		
1	B-1040-1	C.S.	29	22S	35E	NW/4	4-24-74	160.00		Amerada-Hess Corp.
2	B-1651-4	R.R.	34	22S	35E	NW/4SW/4	NOT COMMITTED		40.00	Getty Oil Company
3	B-11644-10	C.S.	28	22S	35E	E/2SE/4	2-7-74	80.00		Amoco Production Co.
4	E-268-4	C.S.	22	22S	35E	N/2NW/4	3-29-74	80.00		Cities Service Oil Co.
5	E-1625-1	C.S.	24	22S	35E	S/2NW/4 SW/4, SW/4NE/4	4-24-74	280.00		Amerada-Hess Corporatio
6	K-4055	C.S.	28	22S	35E	N/2	2-7-74	320.00		Amoco Production Co.
7	K-4056	C.S.	33	22S	35E	All	2-7-74	640.00		Amoco Production Co.
8	K-4115	C.S.	21	22S	35E	N/2	4-5-74	320.00		Allied Chemical Corp.
9	K-4414	C.S.	29	22S	35E	NE/4	3-1-74	160.00		Gulf Oil Corporation
10	K-4415	C.S.	34	22S	35E	SE/4SW/4	3-1-74	40.00		Gulf Oil Corporation
11	K-4608	C.S.	34	22S	35E	E/2	3-1-74	320.00		Ralph Lowe Est.
12	K-4621	C.S.	22	22S	35E	SE/4 SE/4	3-1-74	320.00		Gulf Oil Corporation
13	K-4681	C.S.	32	22S	35E	NE/4	3-1-74	160.00		Gulf Oil Corporation
14	K-5032	C.S.	22	22S	35E	SW/4 NW/4, N/2NE/4, SE/4NE/4	3-1-74	440.00		Ralph Lowe Estate
15	L-1542-1	C.S.	34	22S	35E	W/2NW/4, SE/4NW/4, NE/4SW/4, SW/4SW/4	3-20-74	200.00		
16	L-1641	C.S.	20	22S	35E	NW/4, W/2NE/4, SE/4NE/4	3-26-74	280.00		Mesa Petroleum Company

TERMINATED  
3-20-76



Unit Name ROCK LAKE UNIT (EXPLORATORY)  
 Operator AMOCO PRODUCTION COMPANY  
 LEA LEA  
 County LEA

STATE TRACT NO.	LEASE NO.	INSTI-TUTION	SEC.	TWP.	RGE.	SUBSECTION	RATIFIED DATE	ACRES	ACREAGE NOT RATIFIED	LESSEE
17	L-1926	C.S.	28	22S	35E	SW/4, W/2SE/4	2-7-74	240.00		Amoco Production Co.
18	L-1946	C.S.	32	22S	35E	W/2, SE/4	3-26-74	480.00		Mesa Petroleum Company
19.	L-3383-1	C.S.	29	22S	35E	S/2	3-20-74	320.00		J. C. Barnes
20.	L-5469	C.S.	20	22S	35E	S/2	3-26-74	320.00		Mesa Petroleum Company
21	LG-0358	C.S.	22	22S	35E	NE/4	3-22-74	160.00		BTA Oil Producers
22	LG-0484	C.S.	21	22S	35E	S/2	3-20-74	320.00		Aztec Oil and Gas Co.

**TERMINATED**  
 3-20-76



A. R. Reed  
Division Operations  
Superintendent

RECEIVED  
Aug 20 8 53 AM '76  
STATE LAND OFFICE  
SANTA FE, N. M.

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

5180

August 12, 1976

File: RE0-3210-LF

Re: Termination of Rock Lake Unit  
Lea County, New Mexico

Mr. Phil R. Lucero (2)  
Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87501  
Attention: Mr. Ray D. Graham

Mr. Joe D. Ramey (2) ✓  
New Mexico Oil Conservation  
Commission  
P. O. Box 2088  
Santa Fe, NM 87501

Gentlemen:

Please refer to our letter of June 15, 1976, File: RCJ-2255-LF, which advised that a "third party" was evaluating possible further development in the Rock Lake Unit. This party has now advised that they do not desire to further pursue this possibility.

Our above referenced letter also noted that the majority of working interest owners of the Unit do not themselves wish to perform further development in the Unit.

We, therefore, plan to permanently abandon the Rock Lake Unit Well No. 1 and recommend that the Rock Lake Unit be terminated.

Yours very truly,

*A. R. Reed*  
JVM:fjc  
4/234

cc: All Working Interest Owners  
J. A. Atkinson  
V. E. Staley - Levelland

Rock Lake Unit  
WORKING INTEREST OWNERS

RECEIVED  
AUG 20 8 53 AM '76  
STATE LAND OFFICE  
SANTA FE, N. M.

Mesa Petroleum Co.  
Attn: Mr. Bob Northington  
904 Gihls Tower West  
Midland, TX 79701

Maralo, Inc.  
2200 West Loop South - Suite 130  
Houston, TX 77027

Erma Lowe  
c/o Mr. A. W. Moursund  
P. O. Box 1  
Round Mountain, TX 78663

Gulf Oil Corporation  
Attn: Mr. Joe Mathers  
P. O. Box 1150  
Midland, TX 79701

Amerada-Hess Corporation  
Attn: Mr. Charles Stanford  
P. O. Box 2040  
Tulsa, OK 74102

J. C. Barnes  
P. O. Box 505  
Midland, TX 79701

Aztex Oil & Gas Company  
Attn: Mr. Kenneth Swanson  
2000 First National Bank Building  
Dallas, TX 75202

HNG Oil Company  
P. O. Box 767  
Midland, TX 79701

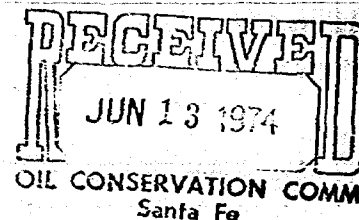
BTA Oil Producers  
Attn: Mr. Barry Beal  
104 South Pecos  
Midland, TX 79701

Royce E. Lawson, Jr.  
P. O. Box 1463  
Midland, TX 79701



**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001



June 7, 1974

Re: EA-47147  
Rock Lake Unit  
Lea County, New Mexico

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

Gentlemen:

In accordance with the request contained in your Case No. 5180, Order No. R-4747 dated March 15, 1974, we enclose one copy of Unit Agreement for the captioned unit which has been executed by Amoco Production Company. We also enclose one copy of ratifications executed by the other working interest owners who committed their working interest to the unit area. We also wish to advise that the captioned unit was effective as of April 15, 1974 and we enclose a copy of the Certificate of Approval from the Commissioner of Public Lands, State of New Mexico.

Yours very truly,

Jack D. Anderson  
Land Department

JUA/jlm  
5/473

Enclosures

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

[Signature]  
Assistant Secretary

AMERADA HESS CORPORATION

[Signature]  
Vice President

STATE OF OKLAHOMA |

COUNTY OF TULSA |

The foregoing instrument was acknowledged before me this 25th day of April, 1974, by L. A. Stricklin, Vice President of Amerada Hess Corporation.

My Commission expires:

My Commission Expires January 16, 1976

[Signature]  
Notary Public in and for  
Tulsa County, Oklahoma

STATE OF \_\_\_\_\_ |

COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_  
County, \_\_\_\_\_

20  
Rab  
JDB  
W  
Y  
FW

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

[Signature]  
Asst. Secretary

GULF OIL CORPORATION

BY: [Signature]  
Attorney in Fact

STATE OF \_\_\_\_\_ I

COUNTY OF \_\_\_\_\_ I

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_.

My Commission expires:

Notary Public in and for  
County, \_\_\_\_\_

STATE OF TEXAS I

COUNTY OF MIDLAND I

*March* The foregoing instrument was acknowledged before me this 1 day of March, 1974, by J. A. Hord

Attorney in Fact of GULF OIL CORPORATION

a Pennsylvania Corporation, on behalf of said corporation.

My Commission expires:

[Signature] E. L. Orrell  
Notary Public in and for  
Midland County, Texas

ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest or both, in one or more of the tracts identified by said Exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

The foregoing instrument was acknowledged before me this 12 day of February, 1974, by Royce E. Lawson, Jr. and wife, June Lawson.

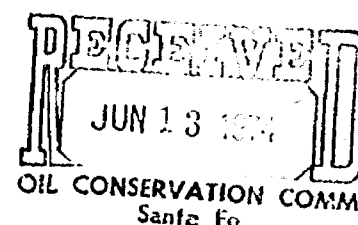
Patricia A. Anderson  
Notary Public in and for Midland  
County, Texas

**BITA E. SANDERSON**  
Notary Public in and for  
Hill Country, Texas  
My Commission Expires June 1, 1975

My Commission Expires:

Notary Public in and for \_\_\_\_\_  
County, \_\_\_\_\_

UNIT AGREEMENT  
FOR THE  
DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO



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UNIT AGREEMENT  
FOR THE DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1974, by and between the parties subscribing, ratifying or consenting hereto and herein referred to as the "parties hereto";

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty or other oil or gas interests in the unit area subject to this agreement; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 88, Laws 1943) as amended by Sec. 1 of Chapter 162, Laws of 1951, (Chap. 7, Art. 11, Sec. 39, N.M. Statutes 1953 Annot.), to consent to and approve the development or operation of State lands under agreements made by lessees of State land jointly or severally with other lessees where such agreements provide for the unit operation or development of part of or all of any oil or gas pool, field, or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 162), (Laws of 1951, Chap. 7, Art. 11, Sec. 41, N.M. Statutes 1953 Annotated) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such agreements for the unit operation and development of part or all of any oil or gas pool, field or area; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico (hereinafter referred to as the "Commission") is authorized by an Act of the Legislature (Chap. 72, Laws 1935;

Chap. 65, Art. 3, Sec. 14, N.M. Statutes 1953 Annotated) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Rock Lake Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined unit area, and agree severally among themselves as follows:

1. UNIT AREA:

The following described land is hereby designated and recognized as constituting the unit area:

Township 22 South, Range 35 East, N.M.P.M.

All of Sections: 20, 21, 22, 27, 28, 29, 32,

33 and 34, containing 5760 acres, more or

less, Lea County, New Mexico.

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the unit operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the unit operator the acreage, percentage and kind of ownership of oil and gas interests in all lands in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the

ownership of any interest other than such interest or interests as are shown on said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the unit operator whenever changes in ownership in the unit area render such revisions necessary or when requested by the Commissioner of Public Lands, hereinafter referred to as "Commissioner".

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement".

2. UNITIZED SUBSTANCES:

All oil, gas, natural gasoline and associated fluid hydrocarbons in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".

3. UNIT OPERATOR:

Amoco Production Company, whose address is P. O. Box 3092, Houston, Texas 77001, is hereby designated as unit operator and by signature hereto commits to this agreement all interest in unitized substances vested in it as set forth in Exhibit "B", and agrees and consents to accept the duties and obligations of unit operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the unit operator, such reference means the unit operator acting in that capacity and not as an owner of interests in unitized substances; and the term "working interest owner" when used herein shall include or refer to unit operator as the owner of a working interest when such an interest is owned by it.

4. RESIGNATION OR REMOVAL OF UNIT OPERATOR:

Unit operator shall have the right to resign at any time, but such resignation shall not become effective until a successor unit operator has been selected and approved in the

manner provided for in Section 5 of this agreement. The resignation of the unit operator shall not release the unit operator from any liability or any default by it hereunder occurring prior to the effective date of its resignation.

Unit operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new unit operator. Such removal shall be effective upon notice thereof to the Commissioner.

The resignation or removal of the unit operator under this agreement shall not terminate his right, title or interest as the owner of a working interest or other interest in unitized substances, but, upon the resignation or removal of unit operator becoming effective, such unit operator shall deliver possession of all equipment, materials and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor unit operator, or to the owners thereof if no such new unit operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

5. SUCCESSOR UNIT OPERATOR:

Whenever the unit operator shall resign as unit operator or shall be removed as hereinabove provided, the owners of the working interests according to their respective acreage interests in all unitized land shall by a majority vote select a successor unit operator; provided that, if a majority but less than seventy-five percent (75%) of the working interests qualified to vote is owned by one party to this agreement, a concurring vote of sufficient additional parties, so as to constitute in the aggregate not less than seventy-five percent (75%)

of the total working interests, shall be required to select a new operator. Such selection shall not become effective until (a) a unit operator so selected shall accept in writing the duties and responsibilities of unit operator, and (b) the selection shall have been approved by the Commissioner. If no successor unit operator is selected and qualified as herein provided, the Commissioner at his election may declare this unit agreement terminated.

6. ACCOUNTING PROVISIONS:

The unit operator shall pay in the first instance all costs and expenses incurred in conducting unit operations hereunder, and such costs and expenses and the working interest benefits accruing hereunder shall be apportioned among the owners of the unitized working interests in accordance with an operating agreement entered into by and between the unit operator and the owners of such interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the unit operator as provided in this section, whether one or more, are herein referred to as the "Operating Agreement". No such agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the unit operator of any right or obligation established under this unit agreement and in case of any inconsistencies or conflict between this unit agreement and the operating agreement, this unit agreement shall prevail.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR:

Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the unitized substances are hereby delegated

to and shall be exercised by the unit operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said unit operator and, together with this agreement, shall constitute and define the rights, privileges and obligations of unit operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the unit operator, in its capacity as unit operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

8. DRILLING TO DISCOVERY:

The unit operator shall, within six (6) months after the effective date of this agreement, commence operations upon an adequate test well for oil and gas upon some part of the lands embraced within the unit area and shall drill said well with due diligence to a depth sufficient to test the Pennsylvanian Age formation or to such a depth as unitized substances shall be discovered in paying quantities at a lesser depth or until it shall, in the opinion of unit operator, be determined that the further drilling of said well shall be unwarranted or impracticable; provided, however, that unit operator shall not, in any event, be required to drill said well to a depth in excess of 13,500 feet. Until a discovery of a deposit of unitized substances capable of being produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations with a reasonable profit) unit operator shall continue drilling diligently, one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the Commissioner, or until it is reasonably proven to the satisfaction of the unit operator that the unitized land is incapable of producing unitized

substances in paying quantities in the formation drilled hereunder.

Any well commenced prior to the effective date of this agreement upon the unit area and drilled to the depth provided herein for the drilling of an initial test well shall be considered as complying with the drilling requirements hereof with respect to the initial well. The Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when in his opinion such action is warranted. Upon failure to comply with the drilling provisions of this article the Commissioner may, after reasonable notice to the unit operator and each working interest owner, lessee and lessor at their last known addresses, declare this unit agreement terminated, and all rights, privileges and obligations granted and assumed by this unit agreement shall cease and terminate as of such date.

9. OBLIGATIONS OF UNIT OPERATOR  
AFTER DISCOVERY OF UNITIZED SUBSTANCES:

Should unitized substances in paying quantities be discovered upon the unit area, the unit operator shall, on or before six months from the time of the completion of the initial discovery well and within thirty days after the expiration of each twelve months period thereafter, file a report with the Commissioner and Commission of the status of the development of the unit area and the development contemplated for the following twelve months period.

It is understood that one of the main considerations for the approval of this agreement by the Commissioner of Public Lands is to secure the orderly development of the unitized lands in accordance with good conservation practices so as to obtain the greatest ultimate recovery of unitized substances.

After discovery of unitized substances in paying quantities, unit operator shall proceed with diligence to

reasonably develop the unitized area as a reasonably prudent operator would develop such area under the same or similar circumstances.

If the unit operator should fail to comply with the above covenant for reasonable development, this agreement may be terminated by the Commissioner as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units; but in such event the basis of participation by the working interest owners shall remain the same as if this agreement had not been terminated as to such lands; provided, however, the Commissioner shall give notice to the unit operator and the lessees of record in the manner prescribed by Sec. 7-11-14, N.M. Statutes 1953 Annotated of intention to cancel on account of any alleged breach of said covenant for reasonable development and any decision entered thereunder shall be subject to appeal in the manner prescribed by Sec. 7-11-17, N.M. Statutes 1953 Annotated; and, provided further, in any event the unit operator shall be given a reasonable opportunity after a final determination within which to remedy any default, failing in which this agreement shall be terminated as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units.

10. PARTICIPATION AFTER DISCOVERY:

Upon completion of a well capable of producing unitized substances in paying quantities, the owners of working interests shall participate in the production therefrom and in all other producing wells which may be drilled pursuant hereto in the proportions that their respective leasehold interests covered hereby on an acreage basis bears to the total number of acres committed to this unit agreement, and such unitized substances shall be deemed to have been produced from the respective leasehold interests participating therein. For the purpose of determining any benefits accruing under this



agreement and the distribution of the royalties payable to the State of New Mexico and other lessors, each separate lease shall have allocated to it such percentage of said production as the number of acres in each lease respectively committed to this agreement bears to the total number of acres committed hereto.

Notwithstanding any provisions contained herein to the contrary, each working interest owner shall have the right to take such owner's proportionate share of the unitized substances in kind or to personally sell or dispose of the same, and nothing herein contained shall be construed as giving or granting to the unit operator the right to sell or otherwise dispose of the proportionate share of any working interest owner without specific authorization from time to time so to do.

11. ALLOCATION OF PRODUCTION:

All unitized substances produced from each tract in the unitized area established under this agreement, except any part thereof used for production or development purposes hereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of the unitized land, and for the purpose of determining any benefits that accrue on an acreage basis, each such tract shall have allocated to it such percentage of said production as its area bears to the entire unitized area. It is hereby agreed that production of unitized substances from the unitized area shall be allocated as provided herein, regardless of whether any wells are drilled on any particular tract of said unitized area.

12. PAYMENT OF RENTALS, ROYALTIES,  
OVERRIDING ROYALTIES AND PRODUCTION PAYMENTS:

All rentals due the State of New Mexico shall be paid by the respective lease owners in accordance with the terms of their leases.

All royalties due the State of New Mexico under the terms of the leases committed to this agreement shall be computed and paid on the basis of all unitized substances allocated to the respective leases committed hereto; provided, however, the State shall be entitled to take in kind its share of the unitized substances allocated to the respective leases, and in such case the unit operator shall make deliveries of such royalty oil in accordance with the terms of the respective leases.

All rentals, if any, due under any leases embracing lands other than the State of New Mexico, shall be paid by the respective lease owners in accordance with the terms of their leases and all royalties due under the terms of any such leases shall be paid on the basis of all unitized substances allocated to the respective leases committed hereto.

If the unit operator introduces gas obtained from sources other than the unitized substances into any producing formation for the purpose of repressuring, stimulating or increasing the ultimate recovery of unitized substances therefrom, a like amount of gas, if available, with due allowance for loss or depletion from any cause may be withdrawn from the formation into which the gas was introduced royalty free as to dry gas but not as to the products extracted therefrom; provided, that such withdrawal shall be at such time as may be provided in a plan of operation consented to by the Commissioner and approved by the Commission as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

If any lease committed hereto is burdened with an overriding royalty, payment out of production or other charge in addition to the usual  $1/8$  royalty, the owner of each such lease shall bear and assume the same out of the unitized substances allocated to the lands embraced in each such lease as provided herein.

13. LEASES AND CONTRACTS CONFORMED AND EXTENDED INSOFAR AS THEY APPLY TO LANDS WITHIN THE UNITIZED AREA:

The terms, conditions and provisions of all leases, subleases, operating agreements and other contracts relating to the exploration, drilling, development or operation for oil or gas of the lands committed to this agreement, shall, as of the effective date hereof, be and the same are hereby expressly modified and amended insofar as they apply to lands within the unitized area to the extent necessary to make the same conform to the provisions hereof and so that the respective terms of said leases and agreements will be extended insofar as necessary to coincide with the term of this agreement and the approval of this agreement by the Commissioner and the respective lessors and lessees shall be effective to conform the provisions and extend the terms of each such lease as to lands within the unitized area to the provisions and terms of this agreement; but otherwise to remain in full force and effect. Each lease committed to this agreement, insofar as it applies to lands within the unitized area, shall continue in force beyond the term provided therein as long as this agreement remains in effect, provided, drilling operations upon the initial test well provided for herein shall have been commenced or said well is in the process of being drilled by the unit operator prior to the expiration of the shortest term lease committed to this agreement. Termination of this agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws, would continue in full force and effect thereafter. The commencement, completion, continued operation or production of a well or wells for unitized substances on the unit area shall be construed and considered as the commencement, completion, continued operation or production on each of the leasehold interests committed to this agreement and operations or production pursuant to this agreement shall be deemed to be operations upon and production from each leasehold interest committed hereto, and there

shall be no obligation on the part of the unit operator or any of the owners of the respective leasehold interests committed hereto to drill offsets to wells as between the leasehold interests committed to this agreement, except as provided in Section 9 hereof.

Any lease embracing lands of the State of New Mexico of which only a portion is committed hereto shall be segregated as to the portion committed and as to the portion not committed and the terms of such leases shall apply separately as to two separate leases as to such segregated portions, commencing as of the effective date hereof. Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced within the unitized area and committed to this agreement, in accordance with the terms of this agreement. If oil and gas, or either of them, are discovered and are being produced in paying quantities from some part of the lands embraced in such lease which part is committed to this agreement at the expiration of the secondary term of such lease, such production shall not be considered as production from lands embraced in such lease which are not within the unitized area, and which are not committed thereto, and drilling or reworking operations upon some part of the lands embraced within the unitized area and committed to this agreement shall be considered as drilling and reworking operations only as to lands embraced within the unit agreement and not as to lands embraced within the lease and not committed to this unit agreement; provided, however, as to any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto upon which oil and gas or either of them has been discovered or is discovered upon that portion of such lands not committed to this agreement, and are being produced in paying quantities prior to the expiration of the primary term of such lease, such production in paying quantities shall serve to continue such lease in full force and effect in accordance with its terms as to all of the lands embraced in said lease.

14. CONSERVATION:

Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State laws or regulations.

15. DRAINAGE:

In the event a well or wells producing oil or gas in paying quantities should be brought in on land adjacent to the unit area, draining unitized substances from the lands embraced therein, unit operator shall drill such offset well or wells as a reasonably prudent operator would drill under the same or similar circumstances.

16. COVENANTS RUN WITH LAND:

The covenants herein shall be construed to be covenants running with the land with respect to the interests of the parties hereto and their successors in interest until this agreement terminates; and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer or any working, royalty or other interest subject hereto shall be binding upon unit operator until the first day of the calendar month after the unit operator is furnished with the original, photostatic or certified copy of the instrument of transfer.

17. EFFECTIVE DATE AND TERM:

This agreement shall become effective upon approval by the Commissioner and shall terminate in five years after such date unless (a) such date of expiration is extended by the Commissioner, or (b) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof; in which case, this agreement shall remain in effect so long as unitized substances are being produced from the unitized land and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can

be produced as aforesaid. This agreement may be terminated at any time by not less than seventy-five percent (75%) on an acreage basis of the owners of the working interests signatory hereto with the approval of the Commissioner. Likewise, the failure to comply with the drilling requirements of Section 8 hereof may subject this agreement to termination as provided in said section.

18. RATE OF PRODUCTION:

All production and the disposal thereof shall be in conformity with allocations, allotments and quotas made or fixed by the Commission and in conformity with all applicable laws and lawful regulations.

19. APPEARANCES:

Unit operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Commissioner of Public Lands and the New Mexico Oil Conservation Commission, and to appeal from orders issued under the regulations of the Commissioner or Commission or to apply for relief from any of said regulations or in any proceedings on its own behalf relative to operations pending before the Commissioner or Commission; provided, however, that any other interest party shall also have the right at his own expense to appear and to participate in any such proceeding.

20. NOTICES:

All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and sent by postpaid registered mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to

such other address as any such party may have furnished in writing to party sending the notice, demand or statement.

21. UNAVOIDABLE DELAY:

All obligations under this agreement requiring the unit operator to commence or continue drilling or to operate on or produce unitized substances from any of the lands covered by this agreement shall be suspended while, but only so long as, the unit operator, despite the exercise of due care and diligence, is prevented from complying with such obligations, in whole or in part, by strikes, war, acts of God, federal, state or municipal law or agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the unit operator, whether similar to matters herein enumerated or not.

22. LOSS OF TITLE:

In the event title to any tract of unitized land or substantial interest therein shall fail and the true owner cannot be induced to join the unit agreement so that such tract is not committed to this agreement or the operation thereof hereunder becomes impracticable as a result thereof, such tract may be eliminated from the unitized area and the interest of the parties readjusted as a result of such tract being eliminated from the unitized area. In the event of a dispute as to the title to any royalty, working or other interest subject hereto, the unit operator may withhold payment or delivery of the allocated portion of the unitized substances involved on account thereof without liability for interest until the dispute is finally settled, provided that no payments of funds due the State of New Mexico shall be withheld. Unit operator as such is relieved from any responsibility for any defect or failure of any title hereunder.



23. SUBSEQUENT JOINDER:

Any oil or gas interest in lands within the unit area not committed hereto prior to the submission of this agreement for final approval by the Commissioner may be committed hereto by the owner or owners of such rights subscribing or consenting to this agreement or executing a ratification thereof; and, if such owner is also a working interest owner, by subscribing to the operating agreement providing for the allocation of costs of exploration, development and operation. A subsequent joinder shall be effective as of the first day of the month following the approval by the Commissioner and the filing with the Commission of duly executed counterparts of the instrument or instruments committing the interest of such owner to this agreement; but such joining party or parties, before participating in any benefits hereunder, shall be required to assume and pay to unit operator their proportionate share of the unit expense incurred prior to such party's or parties' joinder in the unit agreement, and the unit operator shall make appropriate adjustments caused by such joinder without any retroactive adjustment of revenue.

24. COUNTERPARTS:

This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties or may be ratified or consented to by separate instrument in writing specifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described unit area.

IN WITNESS WHEREOF, the undersigned parties hereto



have caused this agreement to be executed as of the respective  
dates set forth opposite their signatures.

FEB 7 1974

Date

UNIT OPERATOR:

AMOCO PRODUCTION COMPANY

By *W. H. Manning Jr.*  
Its Attorney-in-Fact



P. O. Box 3092  
Houston, Texas 77001

WORKING INTEREST OWNERS:

Mesa Petroleum Co.  
Attention: Mr. Bob Northington  
904 Gihla Tower West  
Midland, Texas 79701

Ralph Lowe Estate  
P. O. Box 832  
Midland, Texas 79701

Erma Lowe  
c/o Mr. A. W. Moursund  
P. O. Box 1  
Round Mountain, Texas 78663

Gulf Oil Corporation  
Attention: Mr. Joe Mathers  
P. O. Box 1150  
Midland, Texas 79701

Amerada-Hess Corporation  
Attention: Mr. Charles Stanford  
P. O. Box 2040  
Tulsa, Oklahoma

J. C. Barnes  
P. O. Box 505  
Midland, Texas 79701

Allied Chemical Company  
Attention: Mr. Paul Ferguson  
1300 Wilco Building  
Midland, Texas 79701

Aztec Oil & Gas Company  
Attention: Mr. Kenneth Swanson  
2000 First National Bank Building  
Dallas, Texas 75202

HNG Oil Company  
P. O. Box 767  
Midland, Texas 79701

BTA Oil Producers  
Attention: Mr. Barry Beal  
104 South Pecos  
Midland, Texas 79701

Cities Service Oil Company  
Attention: Mr. Frank Riney  
800 Vaughn Building  
Midland, Texas 79701

R. E. Lawson, Jr.  
Chancellor Building  
Midland, Texas 79701

Getty Oil Company  
Attention: Mr. Clayton Powell  
P. O. Box 1231  
Midland, Texas 79701

Pennzoil United, Inc.  
Attention: Mr. Buddy Davidson  
P. O. Box 1828  
Midland, Texas 79701

THE STATE OF TEXAS    |

COUNTY OF HARRIS     |

The foregoing instrument was acknowledged before me this  
7<sup>th</sup> day of February, 1974, by G. N. MENNINGER,  
as Attorney-in-Fact on behalf of AMOCO PRODUCTION COMPANY.

Irene Haldas  
Notary Public in and for Harris  
County, Texas

IRENE HALDAS  
Notary Public in and for Harris County, Texas  
My Commission Expires 6-1-75

EXHIBIT "B"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

January 1, 1974										
TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE		LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE		WORKING INTEREST AND OWNERSHIP PERCENTAGE	
				PERCENTAGE	PERCENTAGE		PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE
State Leases T22S-R35E N.M.P.M.										
1	Sec. 29: NW/4	160	B-1040-1 HBP	State 12.5%		Amerada-Hess Corp.	None		Amerada-Hess Corp.	100%
2	Sec. 34: NW/4SW/4	40	B-1651-4 HBP	State 12.5%		Getty Oil Co.	None		Getty Oil Company	100%
3	Sec. 28: E/2SE/4	80	B-11644-10 HBP	State 12.5%		Amoco Production Co.	George H. Williams and wife Lois M. Williams 3.125% Gustave Krouse 3.125%		Amoco Production Co.	100%
4	Sec. 22: N/2NW/4	80	E-268-4 HBP	State 12.5%		Cities Service Oil Co.	L. A. Crancer 1.5625% Central Oil Co. 1.5625% O. H. Randel 3.125% Robert E. Boling 1%		Cities Service Oil Co.	100%
5	Sec. 22: S/2 NW/4 Sec. 27: SW/4, SW/4 NE/4	280	E-1625-1 HBP	State 12.5%		Amerada-Hess Corp.	None		Amerada-Hess Corp.	100%
6	Sec. 28: N/2	320	K-4055 4-21-74	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%
7	Sec. 33: A11	640	K-4056 4-21-74	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%
8	Sec. 21: N/2	320	K-4115 5-19-74	State 12.5%		Allied Chemical Corp.	None		Allied Chemical Corp.	100%

January 1, 1974

TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDE ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
9	Sec. 29: NE/4	160	K-4414 9-15-74	State 12.5%	Gulf Oil Corp.	None	Gulf Oil Corp. 100%
10	Sec. 34: SE/4SW/4	40	K-4415 9-15-74	State 12.5%	Gulf Oil Corp.	None	Gulf Oil Corp. 100%
11	Sec. 34: E/2	320	K-4608 12-15-74	State 12.5%	Ralph Lowe Est.	None	Ralph Lowe Estate Erma Lowe 50% 50%
12	Sec. 22: SE/4 Sec. 27: SE/4	320	K-4621 12-15-74	State 12.5%	Gulf Oil Corp.	None	Gulf Oil Corp. 100%
13	Sec. 32: NE/4	160	K-4681 1-19-75	State 12.5%	Gulf Oil Corp.	None	Gulf Oil Corp. 100%
14	Sec. 22: SW/4 Sec. 27: NW/4, N/2 NE/4, SE/4NE/4	440	K-5032 5-18-75	State 12.5%	Ralph Lowe Estate	None	Ralph Lowe Estate Erma Lowe 50% 50%
15	Sec. 34: W/2NW/4, SE/4NW/4, NE/4SW/4, SW/4SW/4	200	L-1542-1 10-15-78	State 12.5%	HNG Oil Company	Royce E. Lawson, Jr. 1.5625%	HNG Oil Company 100%
16	Sec. 20: NW/4, W/2 NE/4, SE/4NE/4	280	L-1641 11-19-78	State 12.5%	Mesa Petroleum Company	None	Mesa Petroleum Co. 100%
17	Sec. 28: SW/4, W/2 SE/4	240	L-1926 12-17-78	State 12.5%	Amoco Production Co.	None	Amoco Production Co. 100%
18	Sec. 32: W/2, SE/4	480	L-1946 12-17-78	State 12.5%	Mesa Petroleum Co.	None	Mesa Petroleum Co. 100%
19	Sec. 29: S/2	320	L-3383-1 8-19-79	State 12.5%	J. C. Barnes	Royce E. Lawson, Jr. 3.125%	J. C. Barnes 100%
20	Sec. 20: S/2	320	L-5469 5-1-81	State 12.5%	Mesa Petroleum Co.	None	Mesa Petroleum Co. 100%

TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDE ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
21	Sec. 22: NE/4	160	LG-0358 7-1-82	State 12.5%	BTA Oil Producers	None	BTA Oil Producers 100%
22	Sec. 21: S/2	320	LG-0484 8-1-82	State 12.5%	Aztec Oil and Gas	None	Aztec Oil and Gas Co. 100%
22 State Tracts: 5680 acres							
Fee Leases T22S-R35E N.M.M.P.							
23	Sec. 20: NE/4NE/4	40	9-10-75	Don E. Gridley & wife Alice F. Gridley John E. Bosserman and wife Carol Jean Bosserman 1/8 x 32.37% Merchant Livestock Co. 3/16 x 67.63%	None	Royce E. Lawson, Jr.	100%
24	Sec. 34: NE/4 NW/4	40	1-7-75	Merchant Livestock Co. 1/8 x 67.63%	None	Royce E. Lawson, Jr.	100%
			1-7-75	Don E. Gridley and wife Alice F. Gridley and John E. Bosserman and wife Carol Jean Bosserman 1/8x32.37%	Royce E. Lawson, Jr. 3.125%	Pennzoil United, Inc.	100%

2 Fee Tracts 80 acres

State Acreage: 5680 = 99.61  
Fee Acreage: 80 = 1.39%  
5760 100.00%

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

Wanda M. Sanders  
Assistant Secretary

AZTEC OIL & GAS COMPANY

By: Kenneth A. Swanson  
Vice President

STATE OF Texas |  
COUNTY OF Dallas |

The foregoing instrument was acknowledged before me this 20th day of March, 1974, by Kenneth A. Swanson

My Commission expires:

PEGGY TAPP  
NOTARY PUBLIC, DALLAS COUNTY, TEXAS  
MY COMMISSION EXPIRES JUNE 1, 1975

Peggy Tapp  
Notary Public in and for  
Dallas County, Texas

STATE OF \_\_\_\_\_ |  
COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

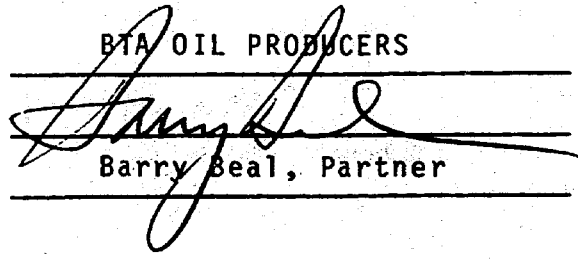
WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

\_\_\_\_\_  
STATE OF TEXAS |  
COUNTY OF MIDLAND |

BTA OIL PRODUCERS  
  
Barry Beal, Partner

The foregoing instrument was acknowledged before me this 22nd day of  
March, 1974, by Barry Beal, Partner

My Commission expires:  
June 1, 1975

  
Notary Public in and for  
Midland County, Texas

STATE OF \_\_\_\_\_ |  
COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of  
\_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_, County, \_\_\_\_\_



RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

J. C. Barnes  
J. C. BARNES

STATE OF TEXAS |

COUNTY OF DALLAS |

The foregoing instrument was acknowledged before me this 20<sup>th</sup> day of MARCH, 1974, by J. C. BARNES

My Commission expires:

June 1, 1975

William Dunn  
Notary Public in and for  
DALLAS County, TEXAS

STATE OF \_\_\_\_\_ |

COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_



RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

Bette J. Scott  
ASSISTANT SECRETARY

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

MESA PETROLEUM CO.

J.K. Larsen  
VICE PRESIDENT

em

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_  
County, \_\_\_\_\_

STATE OF TEXAS

COUNTY OF POTTER

The foregoing instrument was acknowledged before me this 26th day of MARCH, 1974, by J.K. LARSEN,  
VICE PRESIDENT of MESA PETROLEUM CO.

My Commission expires:  
6-1-75

E. J. Jackson  
Notary Public in and for  
POTTER County, TEXAS

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

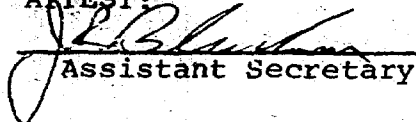
WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

  
Assistant Secretary

HNG OIL COMPANY


By:   
W. F. Roden, President

STATE OF TEXAS |

COUNTY OF MIDLAND |

The foregoing instrument was acknowledged before me this 20<sup>th</sup> day of March, 1974, by W. F. RODEN, President of HNG OIL COMPANY.

My Commission expires:  
June 1, 1975

  
Notary Public in and for  
Midland County, Texas  
CHERYL A. LEA—Notary Public  
IN AND FOR MIDLAND COUNTY, TEXAS

STATE OF \_\_\_\_\_ |

COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

Notary Public in and for  
County, \_\_\_\_\_

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

\_\_\_\_\_  
Erma Lowe  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF TEXAS |

COUNTY OF BLANCO |

The foregoing instrument was acknowledged before me this 14<sup>th</sup> day of MARCH, 1974, by ERMA LOWE.

My Commission expires: 6-1-75

Quinn Kroll  
Notary Public in and for  
Blanco County, TEXAS

STATE OF \_\_\_\_\_ |

COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_ County, \_\_\_\_\_

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

**ALLIED CHEMICAL CORPORATION**

BY: Roger W. Stoneburner  
Attorney-in-Fact

STATE OF TEXAS I

COUNTY OF HARRIS I

The foregoing instrument was acknowledged before me this 5th day of April, 1974, by ROGER W. STONEBURNER.

My Commission expires:

LINDA LOU HARRISON  
Notary Public in and for Harris County, Texas  
My Commission Expires June 1, 1975

Linda Lou Harrison  
Notary Public in and for  
Harris County, Texas

STATE OF \_\_\_\_\_ I

COUNTY OF \_\_\_\_\_ I

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_, County, \_\_\_\_\_

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

\_\_\_\_\_  
CITIES SERVICE OIL COMPANY

STATE OF \_\_\_\_\_ I

COUNTY OF \_\_\_\_\_ I

By Wiley C. Hill  
Wiley C. Hill Attorney-in-Fact

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 1974, by \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

STATE OF OKLAHOMA I

COUNTY OF TULSA I

The foregoing instrument was acknowledged before me this 29th day of March, 1974, by Wiley C. Hill  
Attorney-in-Fact of CITIES SERVICE OIL COMPANY.

My Commission expires:

May 5, 1976.

Sherry L. Snow  
Notary Public in and for  
Tulsa County, Oklahoma

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Rock Lake Unit Area, County of Lea, State of New Mexico", dated January 1, 1974, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Rock Lake Unit Area; and

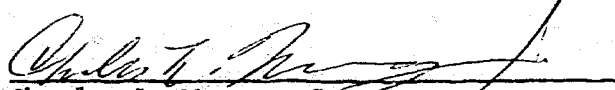
WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

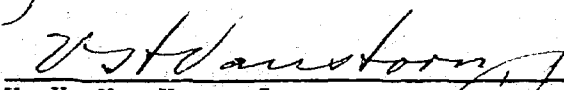
NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner or working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

  
H. L. Landua

  
James L. Morris

  
Charles L. Morgan, Jr.

  
V. H. Van Horn, Jr.

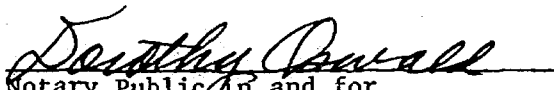
A majority of the duly appointed, qualified and acting  
Independent Executors and Trustees of the Estate of Ralph Lowe, Deceased

THE STATE OF TEXAS    I  
                                  I  
COUNTY OF MIDLAND    I

The foregoing instrument was acknowledged before me this 1st day of March, 1974, by H. L. Landua, Charles L. Morgan, Jr., James L. Morris, and V. H. Van Horn, Jr., a majority of the duly appointed, qualified and acting Independent Executors and Trustees of the Estate of Ralph Lowe, Deceased.

My commission expires:

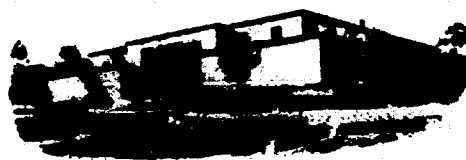
June 1, 1975

  
Notary Public in and for  
Midland County, Texas



ALEX J. ARMIJO  
COMMISSIONER

State of New Mexico



Commissioner of Public Lands

April 15, 1974

5180  
TELEPHONE  
305-827-2748

P. O. BOX 1148  
SANTA FE, NEW MEXICO

Amerco Production Company  
500 Jefferson Building  
P. O. Box 3892  
Houston, Texas 77001

Re: Proposed Rock Lake Unit  
Lea County, New Mexico

ATTENTION: Mr. Jack D. Anderson

Gentlemen:

The Commissioner of Public Lands has this date approved your Rock Lake Unit Agreement, Lea County, New Mexico. The effective date to be as of April 15, 1974.

Approval of the unit is granted with the understanding that you are to file the ratification of Amerada Hess Corporation Committing Tracts 1 and 5 to the unit. In the event Amerada Hess Corporation should not commit its acreage please notify this office immediately. As stated in your letter Tracts 1 and 24 will not be committed to the unit.

Your Ninety (\$90.00) Dollar filing fee has been received.

Enclosed are five (5) Certificates of approval.

Very truly yours,

RAY D. GRAMM, Director  
Oil and Gas Department

AJA/EDG/s  
encls.  
cc:

OCC-Santa Fe, New Mexico ✓





5180

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

A. R. Reed  
Division Operations  
Superintendent

June 15, 1976

File: RCJ-2255-LF

Re: Status of Development Report  
Rock Lake Unit  
Lea County, New Mexico

Mr. Phil R. Lucero (2)  
Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87501  
Attention: Mr. Ray D. Graham

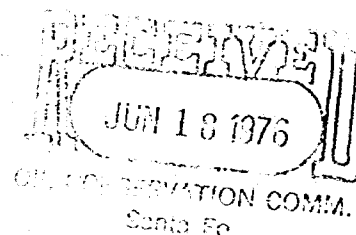
Mr. Joe D. Ramey (2) ✓  
New Mexico Oil Conservation  
Commission  
P. O. Box 2088  
Santa Fe, NM 87501

Gentlemen:

Amoco Production Company respectfully submits this letter as a Report on the Status of Development in the Rock Lake Unit, Lea County, New Mexico.

The last Report on the Status of Development for the Rock Lake Unit was submitted by our letter of November 13, 1975, File: RCJ-4232-LF. Approval of this report was given in a letter dated November 21, 1975, by Mr. Lucero and in a letter dated November 18, 1975, by Mr. Ramey. Our letter stated we were testing various zones in the well and it should be possible for the Unit partners to make some decision relative to future plans for the Unit in the first half of 1976. This letter is intended to meet that requirement.

A large number of zones were tested in the No. 1 well from 10,872' in the Bone Springs up to 6470' in the Delaware, but all gave negative results. It is currently producing periodically from a small oil zone in the Bone Springs and is barely economic to produce. Meanwhile, we have determined that the necessary majority of working interest owners do not themselves wish to pursue any further development in the Unit.





File: RCJ-2255-LF

Page 2

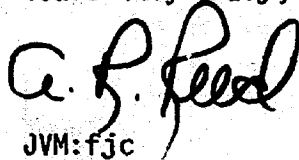
June 15, 1976

We have in turn found a "third party" who is presently evaluating the Unit for the purpose of further exploration. This party is Mr. Clayton Williams and Mr. Ken Griffin. If they conclude they wish to further develop the Unit, they will then need to make an agreement with the 11 working interest owners of the Unit and secure your approval to become Operator of the Unit.

In the event such is not consummated, we plan to recommend permanent abandonment of the well and termination of the Unit.

We respectfully request your approval of the above.

Yours very truly,



JVM:fjc

1/855

Attachment

cc: All Working Interest Owners  
V. E. Staley - Levelland

Rock Lake Unit

WORKING INTEREST OWNERS

Mesa Petroleum Co.  
Attn: Mr. Bob Northington  
904 Gihls Tower West  
Midland, TX 79701

Maralo, Inc.  
2200 West Loop South - Suite 130  
Houston, TX 77027

Erma Lowe  
c/o Mr. A. W. Moursund  
P. O. Box 1  
Round Mountain, TX 78663

Gulf Oil Corporation  
Attn: Mr. Joe Mathers  
P. O. Box 1150  
Midland, TX 79701

Amerada-Hess Corporation  
Attn: Mr. Charles Stanford  
P. O. Box 2040  
Tulsa, OK 74102

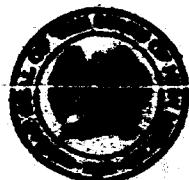
J. C. Barnes  
P. O. Box 505  
Midland, TX 79701

Aztex Oil & Gas Company  
Attn: Mr. Kenneth Swanson  
2000 First National Bank Building  
Dallas, TX 75202

HNG Oil Company  
P. O. Box 767  
Midland, TX 79701

BTA Oil Producers  
Attn: Mr. Barry Beal  
104 South Pecos  
Midland, TX 79701

Royce E. Lawson, Jr.  
P. O. Box 1463  
Midland, TX 79701



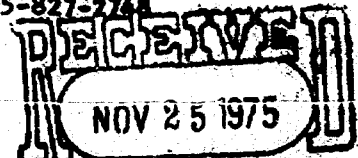
PHIL R. LUCERO  
COMMISSIONER

State of New Mexico



Commissioner of Public Lands  
November 21, 1975

57180  
TELEPHONE  
505-827-2744



OIL CONSERVATION COMM.  
Santa Fe  
P. O. BOX 848  
SANTA FE, NEW MEXICO 87501

Amoco Production Company  
500 Jefferson Building  
P. O. Box 3092  
Houston, Texas 77001

Re: Status of Development Report  
Rock Lake Unit  
Lea County, New Mexico

ATTENTION: Mr. J. C. Burton

Gentlemen:

We are in receipt of your Status of Development report for the Rock Lake Unit, Lea County, New Mexico.

The Commissioner of Public Lands has this date approved the report where you intend to test a number of zones ranging in depth from 10,872' in the Bone Springs up to 6,470' in the Delaware. This approval is given with the understanding that if all these zones are dry you will consider disposition of the well and Unit Agreement.

Please keep this office informed on the progress of the well.

Very truly yours,

PHIL R. LUCERO  
COMMISSIONER OF PUBLIC LANDS

BY:  
RAY D. GRAHAM, Director  
Oil and Gas Division

PRL/RDG/s  
encl. 1 copy of the plan

cc: OCC-Santa Fe, New Mexico

OIL CONSERVATION COMMISSION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

5180

November 18, 1975

Amoco Production Company  
P. O. Box 3092  
Houston, Texas 77001

Attention: Mr. J. C. Burton

Re: Status of Development Report,  
Rock Lake Unit, Lea County,  
New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Status of Development Report for the period November 23, 1975 to November 23, 1976, for the Rock Lake Unit, Lea County, New Mexico, subject to like approval by the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the report is returned herewith.

Very truly yours,

JOE D. RAMEY  
Secretary-Director

JDR/JEK/og

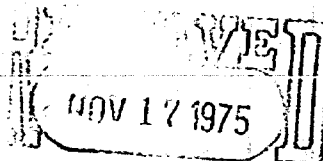
cc: Commissioner of Public Lands  
Santa Fe, New Mexico

C  
O  
P  
Y



J. C. Burton  
Division Operations  
Superintendent

November 13, 1975



CONSERVATION COMM.  
Santa Fe

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

File: RCJ-4232-LF

Re: Status of Development Report  
Rock Lake Unit  
Lea County, New Mexico

Mr. Phil R. Lucero (2)  
Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87501  
Attention: Mr. Ray D. Graham

Mr. J. E. Kapteina (2)  
New Mexico Oil Conservation  
Commission  
P. O. Box 2088  
Santa Fe, NM 87501

Gentlemen:

Amoco Production Company respectfully submits this letter as a Report on the Status of Development in the Rock Lake Unit, Lea County, New Mexico. This report is required under Section 9, page 7 of the Rock Lake Unit Agreement dated January 1, 1974, which was approved by the New Mexico Oil Conservation Commission by Order No. R4747 dated March 15, 1974, and by the Commissioner of Public Lands, State of New Mexico with a Certificate of Approval dated April 15, 1974.

The last Report on the Status of Development for the Rock Lake Unit was submitted by our letter of July 9, 1975, File: RCJ-2121-LF. Approval of this report was given in a letter dated July 15, 1975, from Mr. Ray D. Graham and a letter dated July 11, 1975, from Mr. J. E. Kapteina. The date for the next such report was set at November 23, 1975. This letter is intended to meet that requirement.

The Rock Lake Unit Well No. 1 was completed as a Wolfcamp oil well on November 23, 1974, pumping 53 barrels oil and 61 barrels water per day. The well was drilled to a total depth of 14,125' and tested the Morrow with no commercial results. A plugback was then made to the Wolfcamp which tested up to 22-1/2 barrels oil per hour before the well was completed. Cost of the well and associated equipment was about \$950,000.

File: RCJ-4232-LF

Page 2

November 13, 1975

It was hoped that the well would clean up and produce commercially from the Wolfcamp but such did not occur. After consultation with the various partners a workover was commenced on the well on July 11, 1975. It was first acidized with 5000 gallons acid and a larger approximately \$30,000 pumping unit installed. The well was then placed on test but after an adequate length of time it was concluded that the Wolfcamp could not be made commercially productive.

The various partners were again consulted and decision reached to test a number of zones ranging in depth from 10,872' in the Bone Springs up to 6,470' in the Delaware. This work commenced October 14, 1975, and is still in progress. The zones tested to date have been dry but several remain to be tested. If we do develop production the well will be tested to determine if it is commercial. If all zones are dry, we and the various Unit partners will consider further disposition of the well and Unit and make recommendations accordingly. It should be possible to come to some decision in the first half of 1976.

Your favorable response to our plans will be appreciated.

Yours very truly,

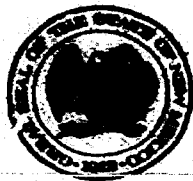
*L. C. Burton*  
*LCH*

JVM/jt  
4/4082

Approved *November 18, 1975*

*[Signature]*  
Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSION



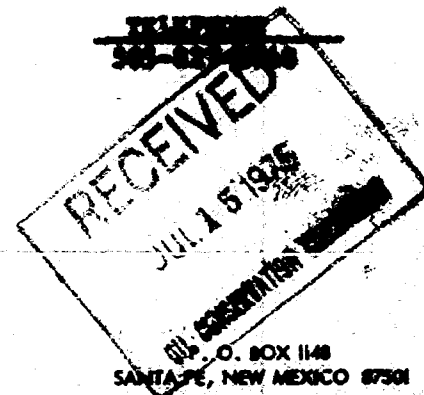
State of New Mexico



Commissioner of Public Lands

July 13, 1975

PHIL R. LUCERO  
COMMISSIONER



Arco Production Company  
300 Jefferson Building  
P. O. Box 3002  
Houston, Texas 77001

Re: Status of Development Report  
Rock Lake Unit  
Los County, New Mexico

ATTENTION: Mr. J. C. Burton

Gentlemen:

The Commissioner of Public Lands has this date approved your Status of Development Report for the Rock Lake Unit, Los County, New Mexico, as required under Section 9, page 7 of the Unit Agreement.

This report covers the period from November 23, 1974, to November 23, 1975 at which time your next report will be due.

Enclosed is one approved copy for your files.

Very truly yours,

PHIL R. LUCERO  
COMMISSIONER OF PUBLIC LANDS

BY:  
RAY D. GRAHAM, Director  
Oil and Gas Division

REL/REG/s  
encl.  
ed:

OCC-Santa Fe, New Mexico ✓

OIL CONSERVATION COMMISSION

P. O. BOX 2068

SANTA FE, NEW MEXICO 87501

July 11, 1975

5180

Amoco Production Company  
P. O. Box 3092  
Houston, Texas 77001

Attention: Mr. J. C. Burton

Re: Status of Development Report  
Rock Lake Unit  
Lea County, New Mexico

Gentlemen:

Receipt of your Report on the Status of Development of the Rock Lake Unit dated July 9, 1975, in compliance with Section 9 of the Unit Agreement, is hereby acknowledged.

Very truly yours,

J. E. KAPTEINA  
Petroleum Engineer

JEK/og

cc: Commissioner of Public Lands - Santa Fe  
Attention: Mr. Ray D. Graham

C  
O  
P  
Y





J. C. Burton  
Assistant Division  
Production Manager

RECEIVED  
JUL 11 1975  
Amoco Production Company  
500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001  
NEW MEXICO OIL CONSERVATION COMM.  
Santa Fe

5180

July 9, 1975

File: RCJ-2121-LF

Re: Status of Development Report  
Rock Lake Unit  
Lea County, New Mexico

Mr. Phil R. Lucero (2)  
Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87501  
Attention: Mr. Ray D. Graham

Mr. James E. Kapteina (2)  
New Mexico Oil Conservation  
Commission  
P. O. Box 2088  
Santa Fe, NM 87501

Gentlemen:

Amoco Production Company respectfully submits this letter as a Report on the Status of Development in the Rock Lake Unit, Lea County, New Mexico. This report is required under Section 9, page 7 of the Rock Lake Unit Agreement dated January 1, 1974, which was approved by the New Mexico Oil Conservation Commission by Order No. R4747 dated March 15, 1974, and by the Commissioner of Public Lands, State of New Mexico with a Certificate of Approval dated April 15, 1974.

The Rock Lake Unit Well No. 1 was spudded April 12, 1974, at a location 1980' from the south line and 660' from the west line of Section 28, Township 22 South, Range 35 East, Lea County, New Mexico. It reached total depth of 14,125' on August 22, 1974. Hole problems were encountered while drilling and a 7-5/8" protection string was set and cemented at 11,535' on July 5, 1974. Drilling continued to 13,940' in the Morrow where a drilling break was encountered and the well started unloading mud. Mud weight was increased and drilling continued to total depth. After some fishing and hole problems, a 5-1/2" liner was set and cemented from 11252' to 14050' on September 4, 1974. Just before setting the liner, a drill stem test was taken of two Wolfcamp zones at about 11,700'. After the testing tool was open some two hours, the well flowed water blanket and drilling mud. Recovery later from the drill pipe was 3700' of drilling mud, 700' of water and 3800' of oil.

Mr. Phil R. Lucero  
Mr. James E. Kapteina  
Page 2  
July 9, 1975

After setting the liner, a 10' Morrow zone from 13902' to 13912' was tested for all water and squeezed off. After experiencing high flood water and equipment problems, the Wolfcamp was perforated on October 8, 1974, from 11692' to 11703' and 11,728' to 11,743'. The upper zone averages 13% porosity and the lower zone averages 16% porosity. These zones were acidized immediately with 2,000 gallons acid at a minimum pressure of 2600 psi and average injection rate of only three barrels per minute. Immediately after the acid job, the well flowed 45 barrels oil and 25 barrels load water in two hours. The well then tested erratically, flowing and swabbing oil and load water over the next four weeks when it was decided to install a pumping unit. This unit was installed and the well finally completed on November 23, 1974, pumping 53 barrels oil and 61 barrels water per day. Continued pumping did not help oil productivity; however, water production did cease during the first month.

We have now concluded that the well may not have been adequately stimulated and/or cleaned up during initial testing. Fishing and hole problems exposed the two high porosity, permeable Wolfcamp zones at about 11,700' to heavy drilling mud from July 9 to September 4 or for about 57 days. Volumetrically recoverable Wolfcamp reserves of 176,000 barrels oil can be calculated for 80 acre drainage for the well; however, the reservoir could be of limited areal extent. In any event, we are proceeding with a larger acid treatment of the Wolfcamp and some improved equipment installation. There are also three up-hole zones in the Bone Springs and two in the Delaware which merit testing at some date.

The next Status of Development Report will be submitted by November 23, 1975.

Yours very truly,

*J. C. Buntorp*

JVM/mct  
3/243



J. C. Burton  
Assistant Division  
Production Manager

Amoco Production Company  
500 Jefferson Building  
P.O. Box 2092  
Houston, Texas 77001  
JUL 11 1975  
OIL CONSERVATION COMM.  
Santa Fe

July 9, 1975

File: RCJ-2121-LF

Re: Status of Development Report  
Rock Lake Unit  
Lea County, New Mexico

Mr. Phil R. Lucero (2)  
Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87501  
Attention: Mr. Ray D. Graham

Mr. James E. Kapteina (2)  
New Mexico Oil Conservation  
Commission  
P. O. Box 2088  
Santa Fe, NM 87501

Gentlemen:

Amoco Production Company respectfully submits this letter as a Report on the Status of Development in the Rock Lake Unit, Lea County, New Mexico. This report is required under Section 9, page 7 of the Rock Lake Unit Agreement dated January 1, 1974, which was approved by the New Mexico Oil Conservation Commission by Order No. R4747 dated March 15, 1974, and by the Commissioner of Public Lands, State of New Mexico with a Certificate of Approval dated April 15, 1974.

The Rock Lake Unit Well No. 1 was spudded April 12, 1974, at a location 1980' from the south line and 660' from the west line of Section 28, Township 22 South, Range 35 East, Lea County, New Mexico. It reached total depth of 14,125' on August 22, 1974. Hole problems were encountered while drilling and a 7-5/8" protection string was set and cemented at 11,535' on July 5, 1974. Drilling continued to 13,940' in the Morrow where a drilling break was encountered and the well started unloading mud. Mud weight was increased and drilling continued to total depth. After some fishing and hole problems, a 5-1/2" liner was set and cemented from 11,252' to 14,050' on September 4, 1974. Just before setting the liner, a drill stem test was taken of two Wolfcamp zones at about 11,700'. After the testing tool was open some two hours, the well flowed water blanket and drilling mud. Recovery later from the drill pipe was 3700' of drilling mud, 700' of water and 3800' of oil.

Mr. Phil R. Lucero  
Mr. James E. Kapteina  
Page 2  
July 9, 1975

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We have now concluded that the well may not have been adequately stimulated and/or cleaned up during initial testing. Fishing and hole problems exposed the two high porosity, permeable Wolfcamp zones at about 11,700' to heavy drilling mud from July 9 to September 4 or for about 57 days. Volumetrically recoverable Wolfcamp reserves of 176,000 barrels oil can be calculated for 80 acre drainage for the well; however, the reservoir could be of limited areal extent. In any event, we are proceeding with a larger acid treatment of the Wolfcamp and some improved equipment installation. There are also three up-hole zones in the Bone Springs and two in the Delaware which merit testing at some date.

The next Status of Development Report will be submitted by November 23, 1975.

Yours very truly,

*J. C. Buntin*

JVM/mct  
3/243

Unit Name ROCK LAKE UNIT (EXPLORATORY)  
 Operator Amoco Production Company  
 County Lea

DATE	OCC CASE NO. 5180	EFFECTIVE DATE	TOTAL ACREAGE	STATE	FEDERAL	MINIMUM FEE	SEGREGATION CLAUSE	TERM
APPROVED	OCC ORDER NO. R-4747	DATE	ACREAGE	STATE	FEDERAL	MINIMUM FEE	SEGREGATION CLAUSE	TERM
Commissioner 4-15-74	Commission 3-15-74	4-15-74	5,760.00	5,680.00	-0-	80.00	Yes	5 yrs.

UNIT AREA

TOWNSHIP 22 SOUTH, RANGE 35 EAST, NPM

Sections 20 through 22: A11  
 Sections 27 through 29: A11  
 Sections 32 through 34: A11

**RECEIVED**  
 MAY 16 1974  
 OIL CONSERVATION COMM.  
 Santa Fe

*ace*

Unit Name ROCK LAKE UNIT (EXPLORATORY)  
Operator AMOCO PRODUCTION COMPANY  
County IEA

STATE TRACT NO.	LEASE NO.	INSTI-TUTION	SEC.	TWP.	RGE.	SUBSECTION	RATIFIED		ACREAGE	LESSEE
							DATE	ACRES		
1	B-1040-1	C.S.	29	22S	35E	NW/4	4-24-74	160.00		Amerada-Hess Corp.
2	B-1651-4	R.R.	34	22S	35E	NW/4SW/4	NOT COMMITTED		40.00	Getty Oil Company
3	B-11644-10	C.S.	28	22S	35E	E/2SE/4	2-7-74	80.00		Amoco Production Co.
4	E-268-4	C.S.	22	22S	35E	N/2NW/4	3-29-74	80.00		Cities Service Oil Co.
5	E-1625-1	C.S.	22 27	22S 22S	35E 35E	S/2NW/4 SW/4, SW/4NE/4	4-24-74	280.00		Amerada-Hess Corporation
6	K-4055	C.S.	28	22S	35E	N/2	2-7-74	320.00		Amoco Production Co.
7	K-4056	C.S.	33	22S	35E	A11	2-7-74	640.00		Amoco Production Co.
8	K-4115	C.S.	21	22S	35E	N/2	4-5-74	320.00		Allied Chemical Corp.
9	K-4414	C.S.	29	22S	35E	NE/4	3-1-74	160.00		Gulf Oil Corporation
10	K-4415	C.S.	34	22S	35E	SE/4SW/4	3-1-74	40.00		Gulf Oil Corporation
11	K-4608	C.S.	34	22S	35E	E/2	3-1-74	320.00		Ralph Lowe Est.
12	K-4621	C.S.	22 27	22S 22S	35E 35E	SE/4 SE/4	3-1-74	320.00		Gulf Oil Corporation
13	K-4681	C.S.	32	22S	35E	NE/4	3-1-74	160.00		Gulf Oil Corporation
14	K-5032	C.S.	22 27	22S 22S	35E 35E	SW/4 NW/4, N/2NE/4, SE/4NE/4	3-1-74	440.00		Ralph Lowe Estate
15	L-1542-1	C.S.	34	22S	35E	W/2NW/4, SE/4NW/4, NE/4SW/4, SW/4SW/4	3-20-74	200.00		
16	L-1641	C.S.	20	22S	35E	NW/4, W/2NE/4, SE/4NE/4	3-26-74	280.00		Mesa Petroleum Company

Unit Name ROCK LAKE UNIT (EXPLORATORY)  
 Operator AMOCO PRODUCTION COMPANY  
 County ITA

STATE TRACT NO.	LEASE NO.	INSTI-TUTION	SEC.	TWP.	RGE.	SUBSECTION	DATE	ACRES	ACREAGE		LESSEE
									RATIFIED	NOT RATIFIED	
17	L-1926	C.S.	28	22S	35E	SW/4, W/2SE/4	2-7-74	240.00			Amoco Production Co.
18	L-1946	C.S.	32	22S	35E	W/2, SE/4	3-26-74	480.00			Mesa Petroleum Company
19	L-3383-1	C.S.	29	22S	35E	S/2	3-20-74	320.00			J. C. Barnes
20	L-5469	C.S.	20	22S	35E	S/2	3-26-74	320.00			Mesa Petroleum Company
21	LG-0358	C.S.	22	22S	35E	NE/4	3-22-74	160.00			BTA Oil Producers
22	LG-0484	C.S.	21	22S	35E	S/2	3-20-74	320.00			Aztec Oil and Gas Co.

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5180  
Order No. R-4747

APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR APPROVAL OF THE ROCK  
LAKE UNIT AGREEMENT, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 13, 1974,  
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of March, 1974, the Commission,  
a quorum being present, having considered the testimony, the  
record, and the recommendations of the Examiner, and being fully  
advised in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks  
approval of the Rock Lake Unit Agreement covering 5,760 acres,  
more or less, of State and Fee lands described as follows:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 22 SOUTH, RANGE 35 EAST, NMPM  
Sections 20 through 22: All  
Sections 27 through 29: All  
Sections 32 through 34: All

(3) That approval of the proposed unit agreement should  
promote the prevention of waste and the protection of correlative  
rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the Rock Lake Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the  
development and operation of the unit area is hereby approved in  
principle as a proper conservation measure; provided, however,  
that notwithstanding any of the provisions contained in said unit  
agreement, this approval shall not be considered as waiving or



-2-  
CASE NO. 5180  
Order No. R-4747

relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

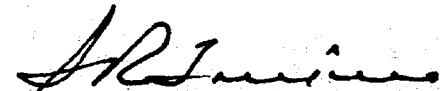
(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.


(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

  
A. L. PORTER, JR., Member & Secretary

S E A L

jr/



# OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**  
**P. O. BOX 2088 - SANTA FE**  
**87501**

**L. R. TRUJILLO**  
**CHAIRMAN**  
**LAND COMMISSIONER**  
**ALEX J. ARMUJO**  
**MEMBER**  
**STATE GEOLOGIST**  
**A. L. PORTER, JR.**  
**SECRETARY - DIRECTOR**

**March 18, 1974**

**Mr. Guy Buell  
Amoco Production Company  
Post Office Box 3092  
Houston, Texas 77001**

Re: CASE NO. 5180 and 5181  
ORDER NO. A-4747 and A-4748  
Applicant:  
**Amoco Production Co.**

**Dear Sir:**

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.  
A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X  
Artesia OCC R-4748  
Aztec OCC

Other \_\_\_\_\_ Unit Division - State Land Office

UNIT AGREEMENT  
FOR THE  
DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

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UNIT AGREEMENT  
FOR THE DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1974, by and between the parties subscribing, ratifying or consenting hereto and herein referred to as the "parties hereto";

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty or other oil or gas interests in the unit area subject to this agreement; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 88, Laws 1943) as amended by Sec. 1 of Chapter 162, Laws of 1951, (Chap. 7, Art. 11, Sec. 39, N.M. Statutes 1953 Annot.), to consent to and approve the development or operation of State lands under agreements made by lessees of State land jointly or severally with other lessees where such agreements provide for the unit operation or development of part of or all of any oil or gas pool, field, or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 162), (Laws of 1951, Chap. 7, Art. 11, Sec. 41, N.M. Statutes 1953 Annotated) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such agreements for the unit operation and development of part or all of any oil or gas pool, field or area; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico (hereinafter referred to as the "Commission") is authorized by an Act of the Legislature (Chap. 72, Laws 1935;

Chap. 65, Art. 3, Sec. 14, N.M. Statutes 1953 Annotated) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Rock Lake Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined unit area, and agree severally among themselves as follows:

1. UNIT AREA:

The following described land is hereby designated and recognized as constituting the unit area:

Township 22 South, Range 35 East, N.M.P.M.

All of Sections: 20, 21, 22, 27, 28, 29, 32, 33 and 34, containing 5760 acres, more or less, Lea County, New Mexico.

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the unit operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the unit operator the acreage, percentage and kind of ownership of oil and gas interests in all lands in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the

ownership of any interest other than such interest or interests as are shown on said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the unit operator whenever changes in ownership in the unit area render such revisions necessary or when requested by the Commissioner of Public Lands, hereinafter referred to as "Commissioner".

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement".

2. UNITIZED SUBSTANCES:

All oil, gas, natural gasoline and associated fluid hydrocarbons in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".

3. UNIT OPERATOR:

Amoco Production Company, whose address is P. O. Box 3092, Houston, Texas 77001, is hereby designated as unit operator and by signature hereto commits to this agreement all interest in unitized substances vested in it as set forth in Exhibit "B", and agrees and consents to accept the duties and obligations of unit operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the unit operator, such reference means the unit operator acting in that capacity and not as an owner of interests in unitized substances; and the term "working interest owner" when used herein shall include or refer to unit operator as the owner of a working interest when such an interest is owned by it.

4. RESIGNATION OR REMOVAL OF UNIT OPERATOR:

Unit operator shall have the right to resign at any time, but such resignation shall not become effective until a successor unit operator has been selected and approved in the

manner provided for in Section 5 of this agreement. The resignation of the unit operator shall not release the unit operator from any liability or any default by it hereunder occurring prior to the effective date of its resignation.

Unit operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new unit operator. Such removal shall be effective upon notice thereof to the Commissioner.

The resignation or removal of the unit operator under this agreement shall not terminate his right, title or interest as the owner of a working interest or other interest in unitized substances, but, upon the resignation or removal of unit operator becoming effective, such unit operator shall deliver possession of all equipment, materials and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor unit operator, or to the owners thereof if no such new unit operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

5. SUCCESSOR UNIT OPERATOR:

Whenever the unit operator shall resign as unit operator or shall be removed as hereinabove provided, the owners of the working interests according to their respective acreage interests in all unitized land shall by a majority vote select a successor unit operator; provided that, if a majority but less than seventy-five percent (75%) of the working interests qualified to vote is owned by one party to this agreement, a concurring vote of sufficient additional parties, so as to constitute in the aggregate not less than seventy-five percent (75%)

of the total working interests, shall be required to select a new operator. Such selection shall not become effective until (a) a unit operator so selected shall accept in writing the duties and responsibilities of unit operator, and (b) the selection shall have been approved by the Commissioner. If no successor unit operator is selected and qualified as herein provided, the Commissioner at his election may declare this unit agreement terminated.

6. ACCOUNTING PROVISIONS:

The unit operator shall pay in the first instance all costs and expenses incurred in conducting unit operations hereunder, and such costs and expenses and the working interest benefits accruing hereunder shall be apportioned among the owners of the unitized working interests in accordance with an operating agreement entered into by and between the unit operator and the owners of such interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the unit operator as provided in this section, whether one or more, are herein referred to as the "Operating Agreement". No such agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the unit operator of any right or obligation established under this unit agreement and in case of any inconsistencies or conflict between this unit agreement and the operating agreement, this unit agreement shall prevail.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR:

Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the unitized substances are hereby delegated



to and shall be exercised by the unit operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said unit operator and, together with this agreement, shall constitute and define the rights, privileges and obligations of unit operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the unit operator, in its capacity as unit operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

8. DRILLING TO DISCOVERY:

The unit operator shall, within six (6) months after the effective date of this agreement, commence operations upon an adequate test well for oil and gas upon some part of the lands embraced within the unit area and shall drill said well with due diligence to a depth sufficient to test the Pennsylvanian Age formation or to such a depth as unitized substances shall be discovered in paying quantities at a lesser depth or until it shall, in the opinion of unit operator, be determined that the further drilling of said well shall be unwarranted or impracticable; provided, however, that unit operator shall not, in any event, be required to drill said well to a depth in excess of 13,500 feet. Until a discovery of a deposit of unitized substances capable of being produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations with a reasonable profit) unit operator shall continue drilling diligently, one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the Commissioner, or until it is reasonably proven to the satisfaction of the unit operator that the unitized land is incapable of producing unitized

substances in paying quantities in the formation drilled hereunder.

Any well commenced prior to the effective date of this agreement upon the unit area and drilled to the depth provided herein for the drilling of an initial test well shall be considered as complying with the drilling requirements hereof with respect to the initial well. The Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when in his opinion such action is warranted. Upon failure to comply with the drilling provisions of this article the Commissioner may, after reasonable notice to the unit operator and each working interest owner, lessee and lessor at their last known addresses, declare this unit agreement terminated, and all rights, privileges and obligations granted and assumed by this unit agreement shall cease and terminate as of such date.

9. OBLIGATIONS OF UNIT OPERATOR  
AFTER DISCOVERY OF UNITIZED SUBSTANCES:

Should unitized substances in paying quantities be discovered upon the unit area, the unit operator shall, on or before six months from the time of the completion of the initial discovery well and within thirty days after the expiration of each twelve months period thereafter, file a report with the Commissioner and Commission of the status of the development of the unit area and the development contemplated for the following twelve months period.

It is understood that one of the main considerations for the approval of this agreement by the Commissioner of Public Lands is to secure the orderly development of the unitized lands in accordance with good conservation practices so as to obtain the greatest ultimate recovery of unitized substances.

After discovery of unitized substances in paying quantities, unit operator shall proceed with diligence to

reasonably develop the unitized area as a reasonably prudent operator would develop such area under the same or similar circumstances.

If the unit operator should fail to comply with the above covenant for reasonable development, this agreement may be terminated by the Commissioner as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units; but in such event the basis of participation by the working interest owners shall remain the same as if this agreement had not been terminated as to such lands; provided, however, the Commissioner shall give notice to the unit operator and the lessees of record in the manner prescribed by Sec. 7-11-14, N.M. Statutes 1953 Annotated of intention to cancel on account of any alleged breach of said covenant for reasonable development and any decision entered thereunder shall be subject to appeal in the manner prescribed by Sec. 7-11-17, N.M. Statutes 1953 Annotated; and, provided further, in any event the unit operator shall be given a reasonable opportunity after a final determination within which to remedy any default, failing in which this agreement shall be terminated as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units.

10. PARTICIPATION AFTER DISCOVERY:

Upon completion of a well capable of producing unitized substances in paying quantities, the owners of working interests shall participate in the production therefrom and in all other producing wells which may be drilled pursuant hereto in the proportions that their respective leasehold interests covered hereby on an acreage basis bears to the total number of acres committed to this unit agreement, and such unitized substances shall be deemed to have been produced from the respective leasehold interests participating therein. For the purpose of determining any benefits accruing under this

agreement and the distribution of the royalties payable to the State of New Mexico and other lessors, each separate lease shall have allocated to it such percentage of said production as the number of acres in each lease respectively committed to this agreement bears to the total number of acres committed hereto.

Notwithstanding any provisions contained herein to the contrary, each working interest owner shall have the right to take such owner's proportionate share of the unitized substances in kind or to personally sell or dispose of the same, and nothing herein contained shall be construed as giving or granting to the unit operator the right to sell or otherwise dispose of the proportionate share of any working interest owner without specific authorization from time to time so to do.

11. ALLOCATION OF PRODUCTION:

All unitized substances produced from each tract in the unitized area established under this agreement, except any part thereof used for production or development purposes hereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of the unitized land, and for the purpose of determining any benefits that accrue on an acreage basis, each such tract shall have allocated to it such percentage of said production as its area bears to the entire unitized area. It is hereby agreed that production of unitized substances from the unitized area shall be allocated as provided herein, regardless of whether any wells are drilled on any particular tract of said unitized area.

12. PAYMENT OF RENTALS, ROYALTIES,  
OVERRIDING ROYALTIES AND PRODUCTION PAYMENTS:

All rentals due the State of New Mexico shall be paid by the respective lease owners in accordance with the terms of their leases.

All royalties due the State of New Mexico under the terms of the leases committed to this agreement shall be computed and paid on the basis of all unitized substances allocated to the respective leases committed hereto; provided, however, the State shall be entitled to take in kind its share of the unitized substances allocated to the respective leases, and in such case the unit operator shall make deliveries of such royalty oil in accordance with the terms of the respective leases.

All rentals, if any, due under any leases embracing lands other than the State of New Mexico, shall be paid by the respective lease owners in accordance with the terms of their leases and all royalties due under the terms of any such leases shall be paid on the basis of all unitized substances allocated to the respective leases committed hereto.

If the unit operator introduces gas obtained from sources other than the unitized substances into any producing formation for the purpose of repressuring, stimulating or increasing the ultimate recovery of unitized substances therefrom, a like amount of gas, if available, with due allowance for loss or depletion from any cause may be withdrawn from the formation into which the gas was introduced royalty free as to dry gas but not as to the products extracted therefrom; provided, that such withdrawal shall be at such time as may be provided in a plan of operation consented to by the Commissioner and approved by the Commission as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

If any lease committed hereto is burdened with an overriding royalty, payment out of production or other charge in addition to the usual  $\frac{1}{8}$  royalty, the owner of each such lease shall bear and assume the same out of the unitized substances allocated to the lands embraced in each such lease as provided herein.

13. LEASES AND CONTRACTS CONFORMED AND EXTENDED INSOFAR AS THEY APPLY TO LANDS WITHIN THE UNITIZED AREA:

The terms, conditions and provisions of all leases, subleases, operating agreements and other contracts relating to the exploration, drilling, development or operation for oil or gas of the lands committed to this agreement, shall, as of the effective date hereof, be and the same are hereby expressly modified and amended insofar as they apply to lands within the unitized area to the extent necessary to make the same conform to the provisions hereof and so that the respective terms of said leases and agreements will be extended insofar as necessary to coincide with the term of this agreement and the approval of this agreement by the Commissioner and the respective lessors and lessees shall be effective to conform the provisions and extend the terms of each such lease as to lands within the unitized area to the provisions and terms of this agreement; but otherwise to remain in full force and effect. Each lease committed to this agreement, insofar as it applies to lands within the unitized area, shall continue in force beyond the term provided therein as long as this agreement remains in effect, provided, drilling operations upon the initial test well provided for herein shall have been commenced or said well is in the process of being drilled by the unit operator prior to the expiration of the shortest term lease committed to this agreement. Termination of this agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws, would continue in full force and effect thereafter. The commencement, completion, continued operation or production of a well or wells for unitized substances on the unit area shall be construed and considered as the commencement, completion, continued operation or production on each of the leasehold interests committed to this agreement and operations or production pursuant to this agreement shall be deemed to be operations upon and production from each leasehold interest committed hereto, and there

shall be no obligation on the part of the unit operator or any of the owners of the respective leasehold interests committed hereto to drill offsets to wells as between the leasehold interests committed to this agreement, except as provided in Section 9 hereof.

Any lease embracing lands of the State of New Mexico of which only a portion is committed hereto shall be segregated as to the portion committed and as to the portion not committed and the terms of such leases shall apply separately as to two separate leases as to such segregated portions, commencing as of the effective date hereof. Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced within the unitized area and committed to this agreement, in accordance with the terms of this agreement. If oil and gas, or either of them, are discovered and are being produced in paying quantities from some part of the lands embraced in such lease which part is committed to this agreement at the expiration of the secondary term of such lease, such production shall not be considered as production from lands embraced in such lease which are not within the unitized area, and which are not committed thereto, and drilling or reworking operations upon some part of the lands embraced within the unitized area and committed to this agreement shall be considered as drilling and reworking operations only as to lands embraced within the unit agreement and not as to lands embraced within the lease and not committed to this unit agreement; provided, however, as to any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto upon which oil and gas or either of them has been discovered or is discovered upon that portion of such lands not committed to this agreement, and are being produced in paying quantities prior to the expiration of the primary term of such lease, such production in paying quantities shall serve to continue such lease in full force and effect in accordance with its terms as to all of the lands embraced in said lease.

14. CONSERVATION:

Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State laws or regulations.

15. DRAINAGE:

In the event a well or wells producing oil or gas in paying quantities should be brought in on land adjacent to the unit area, draining unitized substances from the lands embraced therein, unit operator shall drill such offset well or wells as a reasonably prudent operator would drill under the same or similar circumstances.

16. COVENANTS RUN WITH LAND:

The covenants herein shall be construed to be covenants running with the land with respect to the interests of the parties hereto and their successors in interest until this agreement terminates; and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer or any working, royalty or other interest subject hereto shall be binding upon unit operator until the first day of the calendar month after the unit operator is furnished with the original, photostatic or certified copy of the instrument of transfer.

17. EFFECTIVE DATE AND TERM:

This agreement shall become effective upon approval by the Commissioner and shall terminate in five years after such date unless (a) such date of expiration is extended by the Commissioner, or (b) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof; in which case, this agreement shall remain in effect so long as unitized substances are being produced from the unitized land and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can



be produced as aforesaid. This agreement may be terminated at any time by not less than seventy-five percent (75%) on an acreage basis of the owners of the working interests signatory hereto with the approval of the Commissioner. Likewise, the failure to comply with the drilling requirements of Section 8 hereof may subject this agreement to termination as provided in said section.

18. RATE OF PRODUCTION:

All production and the disposal thereof shall be in conformity with allocations, allotments and quotas made or fixed by the Commission and in conformity with all applicable laws and lawful regulations.

19. APPEARANCES:

Unit operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Commissioner of Public Lands and the New Mexico Oil Conservation Commission, and to appeal from orders issued under the regulations of the Commissioner or Commission or to apply for relief from any of said regulations or in any proceedings on its own behalf relative to operations pending before the Commissioner or Commission; provided, however, that any other interest party shall also have the right at his own expense to appear and to participate in any such proceeding.

20. NOTICES:

All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and sent by postpaid registered mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to

such other address as any such party may have furnished in writing to party sending the notice, demand or statement.

21. UNAVOIDABLE DELAY:

All obligations under this agreement requiring the unit operator to commence or continue drilling or to operate on or produce unitized substances from any of the lands covered by this agreement shall be suspended while, but only so long as, the unit operator, despite the exercise of due care and diligence, is prevented from complying with such obligations, in whole or in part, by strikes, war, acts of God, federal, state or municipal law or agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the unit operator, whether similar to matters herein enumerated or not.

22. LOSS OF TITLE:

In the event title to any tract of unitized land or substantial interest therein shall fail and the true owner cannot be induced to join the unit agreement so that such tract is not committed to this agreement or the operation thereof hereunder becomes impracticable as a result thereof, such tract may be eliminated from the unitized area and the interest of the parties readjusted as a result of such tract being eliminated from the unitized area. In the event of a dispute as to the title to any royalty, working or other interest subject hereto, the unit operator may withhold payment or delivery of the allocated portion of the unitized substances involved on account thereof without liability for interest until the dispute is finally settled, provided that no payments of funds due the State of New Mexico shall be withheld. Unit operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

23. SUBSEQUENT JOINDER:

Any oil or gas interest in lands within the unit area not committed hereto prior to the submission of this agreement for final approval by the Commissioner may be committed hereto by the owner or owners of such rights subscribing or consenting to this agreement or executing a ratification thereof; and, if such owner is also a working interest owner, by subscribing to the operating agreement providing for the allocation of costs of exploration, development and operation. A subsequent joinder shall be effective as of the first day of the month following the approval by the Commissioner and the filing with the Commission of duly executed counterparts of the instrument or instruments committing the interest of such owner to this agreement; but such joining party or parties, before participating in any benefits hereunder, shall be required to assume and pay to unit operator their proportionate share of the unit expense incurred prior to such party's or parties' joinder in the unit agreement, and the unit operator shall make appropriate adjustments caused by such joinder without any retroactive adjustment of revenue.

24. COUNTERPARTS:

This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties or may be ratified or consented to by separate instrument in writing specifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described unit area.

IN WITNESS WHEREOF, the undersigned parties hereto

have caused this agreement to be executed as of the respective  
dates set forth opposite their signatures.

FEB 7 1974  
Date

UNIT OPERATOR:

AMOCO PRODUCTION COMPANY

By *K. H. McManis*  
Its Attorney-in-Fact



P. O. Box 3092  
Houston, Texas 77001

WORKING INTEREST OWNERS:

Mesa Petroleum Co.  
Attention: Mr. Bob Northington  
904 Gihls Tower West  
Midland, Texas 79701

Ralph Lowe Estate  
P. O. Box 832  
Midland, Texas 79701

Erma Lowe  
c/o Mr. A. W. Moursund  
P. O. Box 1  
Round Mountain, Texas 78663

Gulf Oil Corporation  
Attention: Mr. Joe Mathers  
P. O. Box 1150  
Midland, Texas 79701

Amerada-Hess Corporation  
Attention: Mr. Charles Stanford  
P. O. Box 2040  
Tulsa, Oklahoma

J. C. Barnes  
P. O. Box 505  
Midland, Texas 79701

Allied Chemical Company  
Attention: Mr. Paul Ferguson  
1300 Wilco Building  
Midland, Texas 79701

Aztec Oil & Gas Company  
Attention: Mr. Kenneth Swanson  
2000 First National Bank Building  
Dallas, Texas 75202

HNG Oil Company  
P. O. Box 767  
Midland, Texas 79701

BTA Oil Producers  
Attention: Mr. Barry Beal  
104 South Pecos  
Midland, Texas 79701

Cities Service Oil Company  
Attention: Mr. Frank Riney  
800 Vaughn Building  
Midland, Texas 79701

R. E. Lawson, Jr.  
Chancellor Building  
Midland, Texas 79701

Getty Oil Company  
Attention: Mr. Clayton Powell  
P. O. Box 1231  
Midland, Texas 79701

Pennzoil United, Inc.  
Attention: Mr. Buddy Davidson  
P. O. Box 1828  
Midland, Texas 79701

THE STATE OF TEXAS |

COUNTY OF HARRIS |

The foregoing instrument was acknowledged before me this  
7<sup>th</sup> day of February, 1974, by C. H. MENNINGER,  
as Attorney-in-Fact on behalf of AMOCO PRODUCTION COMPANY.

Irene Haldas  
Notary Public in and for Harris  
County, Texas

IRENE HALDAS  
Notary Public in and for Harris County, Texas  
My Commission Expires 6-1-75

MAP

**EXHIBIT "B"**  
**ROCK LAKE UNIT AREA**  
**LEA COUNTY, NEW MEXICO**

January 1, 1974											
TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE		LESSEE OF RECORD		OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE		WORKING INTEREST AND OWNERSHIP PERCENTAGE	
State Leases T22S-R35E N.M.P.M.											
1	Sec. 29: NW/4	160	B-1040-1 HBP	State 12.5%		Amerada-Hess Corp.	None		Amerada-Hess Corp.	100%	
2	Sec. 34: NW/4SW/4	40	B-1651-4 HBP	State 12.5%		Getty Oil Co.	None		Getty Oil Company	100%	
3	Sec. 28: E/2SE/4	80	B-11644-10 HBP	State 12.5%		Amoco Production Co.	George H. Williams and wife Lois M. Williams 3.125% Gustave Krouse 3.125%		Amoco Production Co.	100%	
4	Sec. 22: N/2NW/4	80	E-268-4 HBP	State 12.5%		Cities Service Oil Co.	L. A. Crancer 1.5625% Central Oil Co. 1.5625% O. H. Randel 3.125% Robert E. Bolting 1%		Cities Service Oil Co.	100%	
5	Sec. 22: S/2 NW/4 Sec. 27: SW/4, SW/4 NE/4	280	E-1625-1 HBP	State 12.5%		Amerada-Hess Corp.	None		Amerada-Hess Corp.	100%	
6	Sec. 28: N/2	320	K-4055 4-21-74	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%	
7	Sec. 33: A11	640	K-4056 4-21-74	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%	
8	Sec. 21: N/2	320	K-4115 5-19-74	State 12.5%		Allied Chemical Corp.	None		Allied Chemical Corp.	100%	

TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE		LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE		WORKING INTEREST AND OWNERSHIP PERCENTAGE	
9	Sec. 29: NE/4	160	K-4414 9-15-74	State 12.5%		Gulf Oil Corp.	None		Gulf Oil Corp.	100%
10	Sec. 34: SE/4SW/4	40	K-4415 9-15-74	State 12.5%		Gulf Oil Corp.	None		Gulf Oil Corp.	100%
11	Sec. 34: E/2	320	K-4608 12-15-74	State 12.5%		Ralph Lowe Est.	None		Ralph Lowe Estate Erma Lowe	50% 50%
12	Sec. 22: SE/4 Sec. 27: SE/4	320	K-4621 12-15-74	State 12.5%		Gulf Oil Corp.	None		Gulf Oil Corp.	100%
13	Sec. 32: NE/4	160	K-4681 1-19-75	State 12.5%		Gulf Oil Corp.	None		Gulf Oil Corp.	100%
14	Sec. 22: SW/4 Sec. 27: NW/4, N/2 NE/4, SE/4NE/4	440	K-5032 5-18-75	State 12.5%		Ralph Lowe Estate	None		Ralph Lowe Estate Erma Lowe	50% 50%
15	Sec. 34: W/2NW/4, SE/4NW/4, NE/4SW/4, SW/4SW/4	200	L-1542-1 10-15-78	State 12.5%		HNG Oil Company	Royce E. Lawson, Jr. 1.5625%		HNG Oil Company	100%
16	Sec. 20: NW/4, W/2 NE/4, SE/4NE/4	280	L-1641 11-19-78	State 12.5%		Mesa Petroleum Company	None		Mesa Petroleum Co.	100%
17	Sec. 28: SW/4, W/2 SE/4	240	L-1926 12-17-78	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%
18	Sec. 32: W/2, SE/4	480	L-1946 12-17-78	State 12.5%		Mesa Petroleum Co.	None		Mesa Petroleum Co.	100%
19	Sec. 29: S/2	320	L-3383-1 8-19-79	State 12.5%		J. C. Barnes	Royce E. Lawson, Jr. 3.125%		J. C. Barnes	100%
20	Sec. 20: S/2	320	L-5469 5-1-81	State 12.5%		Mesa Petroleum Co.	None		Mesa Petroleum Co.	100%



TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDE ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
21	Sec. 22: NE/4	160	LG-0358 7-1-82	State 12.5%	BTA Oil Producers	None	BTA Oil Producers 100%
22	Sec. 21: S/2	320	LG-0494 8-1-82	State 12.5%	Aztec Oil and Gas	None	Aztec Oil and Gas Co. 100%
<u>22 State Tracts: 5680 acres</u>							
<u>Fee Leases T22S-R35E N.M.M.P.</u>							
23	Sec. 20: NE/4NE/4	40	9-10-75	Don E. Gridley & wife Alice F. Gridley John E. Bosserman and wife Carol Jean Bosserman 1/8 x 32.37% Merchant Livestock Co. 3/16 x 67.63%	None	Royce E. Lawson, Jr.	100%
24	Sec. 34: NE/4 NW/4	40	1-7-75	Merchant Livestock Co. 1/8 x 67.63%	None	Royce E. Lawson, Jr.	100%
			1-7-75	Don E. Gridley and wife Alice F. Gridley and John E. Bosserman and wife Carol Jean Bosserman 1/8x32.37%		Royce E. Lawson, Jr. 3.125%	Pennzoil United, Inc. 100%

2 Fee Tracts 80 acres

State Acreage: 5680 = 98.61  
Fee Acreage: 80 = 1.39%  
5760 100.00%

UNIT AGREEMENT  
FOR THE  
DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

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<b>BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION</b>	
EXHIBIT NO. <u>2</u>	15
CASE NO. <u>5180</u>	15
Submitted by <u>Amoco</u>	16
Hearing Date <u>3-13-74</u>	16

UNIT AGREEMENT  
FOR THE DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1974, by and between the parties subscribing, ratifying or consenting hereto and herein referred to as the "parties hereto";

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty or other oil or gas interests in the unit area subject to this agreement; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 88, Laws 1943) as amended by Sec. 1 of Chapter 162, Laws of 1951, (Chap. 7, Art. 11, Sec. 39, N.M. Statutes 1953 Annot.), to consent to and approve the development or operation of State lands under agreements made by lessees of State land jointly or severally with other lessees where such agreements provide for the unit operation or development of part of or all of any oil or gas pool, field, or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 162), (Laws of 1951, Chap. 7, Art. 11, Sec. 41, N.M. Statutes 1953 Annotated) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such agreements for the unit operation and development of part or all of any oil or gas pool, field or area; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico (hereinafter referred to as the "Commission") is authorized by an Act of the Legislature (Chap. 72, Laws 1935;

UNIT AGREEMENT  
FOR THE DEVELOPMENT AND OPERATION  
OF THE  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1974, by and between the parties subscribing, ratifying or consenting hereto and herein referred to as the "parties hereto";

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty or other oil or gas interests in the unit area subject to this agreement; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 88, Laws 1943) as amended by Sec. 1 of Chapter 162, Laws of 1951, (Chap. 7, Art. 11, Sec. 39, N.M. Statutes 1953 Annot.), to consent to and approve the development or operation of State lands under agreements made by lessees of State land jointly or severally with other lessees where such agreements provide for the unit operation or development of part of or all of any oil or gas pool, field, or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 162), (Laws of 1951, Chap. 7, Art. 11, Sec. 41, N.M. Statutes 1953 Annotated) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such agreements for the unit operation and development of part or all of any oil or gas pool, field or area; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico (hereinafter referred to as the "Commission") is authorized by an Act of the Legislature (Chap. 72, Laws 1935;

Chap. 65, Art. 3, Sec. 14, N.M. Statutes 1953 Annotated) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Rock Lake Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined unit area, and agree severally among themselves as follows:

1. UNIT AREA:

The following described land is hereby designated and recognized as constituting the unit area:

Township 22 South, Range 35 East, N.M.P.M.

All of Sections: 20, 21, 22, 27, 28, 29, 32, 33 and 34, containing 5760 acres, more or less, Lea County, New Mexico.

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the unit operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the unit operator the acreage, percentage and kind of ownership of oil and gas interests in all lands in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the

ownership of any interest other than such interest or interests as are shown on said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the unit operator whenever changes in ownership in the unit area render such revisions necessary or when requested by the Commissioner of Public Lands, hereinafter referred to as "Commissioner".

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement".

2. UNITIZED SUBSTANCES:

All oil, gas, natural gasoline and associated fluid hydrocarbons in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".

3. UNIT OPERATOR:

Amoco Production Company, whose address is P. O. Box 3092, Houston, Texas 77001, is hereby designated as unit operator and by signature hereto commits to this agreement all interest in unitized substances vested in it as set forth in Exhibit "B", and agrees and consents to accept the duties and obligations of unit operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the unit operator, such reference means the unit operator acting in that capacity and not as an owner of interests in unitized substances; and the term "working interest owner" when used herein shall include or refer to unit operator as the owner of a working interest when such an interest is owned by it.

4. RESIGNATION OR REMOVAL OF UNIT OPERATOR:

Unit operator shall have the right to resign at any time, but such resignation shall not become effective until a successor unit operator has been selected and approved in the

manner provided for in Section 5 of this agreement. The resignation of the unit operator shall not release the unit operator from any liability or any default by it hereunder occurring prior to the effective date of its resignation.

Unit operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new unit operator. Such removal shall be effective upon notice thereof to the Commissioner.

The resignation or removal of the unit operator under this agreement shall not terminate his right, title or interest as the owner of a working interest or other interest in unitized substances, but, upon the resignation or removal of unit operator becoming effective, such unit operator shall deliver possession of all equipment, materials and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor unit operator, or to the owners thereof if no such new unit operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

5. SUCCESSOR UNIT OPERATOR:

Whenever the unit operator shall resign as unit operator or shall be removed as hereinabove provided, the owners of the working interests according to their respective acreage interests in all unitized land shall by a majority vote select a successor unit operator; provided that, if a majority but less than seventy-five percent (75%) of the working interests qualified to vote is owned by one party to this agreement, a concurring vote of sufficient additional parties, so as to constitute in the aggregate not less than seventy-five percent (75%)

of the total working interests, shall be required to select a new operator. Such selection shall not become effective until (a) a unit operator so selected shall accept in writing the duties and responsibilities of unit operator, and (b) the selection shall have been approved by the Commissioner. If no successor unit operator is selected and qualified as herein provided, the Commissioner at his election may declare this unit agreement terminated.

6. ACCOUNTING PROVISIONS:

The unit operator shall pay in the first instance all costs and expenses incurred in conducting unit operations hereunder, and such costs and expenses and the working interest benefits accruing hereunder shall be apportioned among the owners of the unitized working interests in accordance with an operating agreement entered into by and between the unit operator and the owners of such interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the unit operator as provided in this section, whether one or more, are herein referred to as the "Operating Agreement". No such agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the unit operator of any right or obligation established under this unit agreement and in case of any inconsistencies or conflict between this unit agreement and the operating agreement, this unit agreement shall prevail.

7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR:

Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the unitized substances are hereby delegated



to and shall be exercised by the unit operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said unit operator and, together with this agreement, shall constitute and define the rights, privileges and obligations of unit operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the unit operator, in its capacity as unit operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

8. DRILLING TO DISCOVERY:

The unit operator shall, within six (6) months after the effective date of this agreement, commence operations upon an adequate test well for oil and gas upon some part of the lands embraced within the unit area and shall drill said well with due diligence to a depth sufficient to test the Pennsylvanian Age formation or to such a depth as unitized substances shall be discovered in paying quantities at a lesser depth or until it shall, in the opinion of unit operator, be determined that the further drilling of said well shall be unwarranted or impracticable; provided, however, that unit operator shall not, in any event, be required to drill said well to a depth in excess of 13,500 feet. Until a discovery of a deposit of unitized substances capable of being produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations with a reasonable profit) unit operator shall continue drilling diligently, one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the Commissioner, or until it is reasonably proven to the satisfaction of the unit operator that the unitized land is incapable of producing unitized

substances in paying quantities in the formation drilled hereunder.

Any well commenced prior to the effective date of this agreement upon the unit area and drilled to the depth provided herein for the drilling of an initial test well shall be considered as complying with the drilling requirements hereof with respect to the initial well. The Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when in his opinion such action is warranted. Upon failure to comply with the drilling provisions of this article the Commissioner may, after reasonable notice to the unit operator and each working interest owner, lessee and lessor at their last known addresses, declare this unit agreement terminated, and all rights, privileges and obligations granted and assumed by this unit agreement shall cease and terminate as of such date.

9. OBLIGATIONS OF UNIT OPERATOR  
AFTER DISCOVERY OF UNITIZED SUBSTANCES:

Should unitized substances in paying quantities be discovered upon the unit area, the unit operator shall, on or before six months from the time of the completion of the initial discovery well and within thirty days after the expiration of each twelve months period thereafter, file a report with the Commissioner and Commission of the status of the development of the unit area and the development contemplated for the following twelve months period.

It is understood that one of the main considerations for the approval of this agreement by the Commissioner of Public Lands is to secure the orderly development of the unitized lands in accordance with good conservation practices so as to obtain the greatest ultimate recovery of unitized substances.

After discovery of unitized substances in paying quantities, unit operator shall proceed with diligence to

reasonably develop the unitized area as a reasonably prudent operator would develop such area under the same or similar circumstances.

If the unit operator should fail to comply with the above covenant for reasonable development, this agreement may be terminated by the Commissioner as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units; but in such event the basis of participation by the working interest owners shall remain the same as if this agreement had not been terminated as to such lands; provided, however, the Commissioner shall give notice to the unit operator and the lessees of record in the manner prescribed by Sec. 7-11-14, N.M. Statutes 1953 Annotated of intention to cancel on account of any alleged breach of said covenant for reasonable development and any decision entered thereunder shall be subject to appeal in the manner prescribed by Sec. 7-11-17, N.M. Statutes 1953 Annotated; and, provided further, in any event the unit operator shall be given a reasonable opportunity after a final determination within which to remedy any default, failing in which this agreement shall be terminated as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units.

10. PARTICIPATION AFTER DISCOVERY:

Upon completion of a well capable of producing unitized substances in paying quantities, the owners of working interests shall participate in the production therefrom and in all other producing wells which may be drilled pursuant hereto in the proportions that their respective leasehold interests covered hereby on an acreage basis bears to the total number of acres committed to this unit agreement, and such unitized substances shall be deemed to have been produced from the respective leasehold interests participating therein. For the purpose of determining any benefits accruing under this

agreement and the distribution of the royalties payable to the State of New Mexico and other lessors, each separate lease shall have allocated to it such percentage of said production as the number of acres in each lease respectively committed to this agreement bears to the total number of acres committed hereto.

Notwithstanding any provisions contained herein to the contrary, each working interest owner shall have the right to take such owner's proportionate share of the unitized substances in kind or to personally sell or dispose of the same, and nothing herein contained shall be construed as giving or granting to the unit operator the right to sell or otherwise dispose of the proportionate share of any working interest owner without specific authorization from time to time so to do.

11. ALLOCATION OF PRODUCTION:

All unitized substances produced from each tract in the unitized area established under this agreement, except any part thereof used for production or development purposes hereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of the unitized land, and for the purpose of determining any benefits that accrue on an acreage basis, each such tract shall have allocated to it such percentage of said production as its area bears to the entire unitized area. It is hereby agreed that production of unitized substances from the unitized area shall be allocated as provided herein, regardless of whether any wells are drilled on any particular tract of said unitized area.

12. PAYMENT OF RENTALS, ROYALTIES,  
OVERRIDING ROYALTIES AND PRODUCTION PAYMENTS:

All rentals due the State of New Mexico shall be paid by the respective lease owners in accordance with the terms of their leases.

All royalties due the State of New Mexico under the terms of the leases committed to this agreement shall be computed and paid on the basis of all unitized substances allocated to the respective leases committed hereto; provided, however, the State shall be entitled to take in kind its share of the unitized substances allocated to the respective leases, and in such case the unit operator shall make deliveries of such royalty oil in accordance with the terms of the respective leases.

All rentals, if any, due under any leases embracing lands other than the State of New Mexico, shall be paid by the respective lease owners in accordance with the terms of their leases and all royalties due under the terms of any such leases shall be paid on the basis of all unitized substances allocated to the respective leases committed hereto.

If the unit operator introduces gas obtained from sources other than the unitized substances into any producing formation for the purpose of repressuring, stimulating or increasing the ultimate recovery of unitized substances therefrom, a like amount of gas, if available, with due allowance for loss or depletion from any cause may be withdrawn from the formation into which the gas was introduced royalty free as to dry gas but not as to the products extracted therefrom; provided, that such withdrawal shall be at such time as may be provided in a plan of operation consented to by the Commissioner and approved by the Commission as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

If any lease committed hereto is burdened with an overriding royalty, payment out of production or other charge in addition to the usual  $\frac{1}{8}$  royalty, the owner of each such lease shall bear and assume the same out of the unitized substances allocated to the lands embraced in each such lease as provided herein.

13. LEASES AND CONTRACTS CONFORMED AND EXTENDED INSOFAR AS THEY APPLY TO LANDS WITHIN THE UNITIZED AREA:

The terms, conditions and provisions of all leases, subleases, operating agreements and other contracts relating to the exploration, drilling, development or operation for oil or gas of the lands committed to this agreement, shall, as of the effective date hereof, be and the same are hereby expressly modified and amended insofar as they apply to lands within the unitized area to the extent necessary to make the same conform to the provisions hereof and so that the respective terms of said leases and agreements will be extended insofar as necessary to coincide with the term of this agreement and the approval of this agreement by the Commissioner and the respective lessors and lessees shall be effective to conform the provisions and extend the terms of each such lease as to lands within the unitized area to the provisions and terms of this agreement; but otherwise to remain in full force and effect. Each lease committed to this agreement, insofar as it applies to lands within the unitized area, shall continue in force beyond the term provided therein as long as this agreement remains in effect, provided, drilling operations upon the initial test well provided for herein shall have been commenced or said well is in the process of being drilled by the unit operator prior to the expiration of the shortest term lease committed to this agreement. Termination of this agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws, would continue in full force and effect thereafter. The commencement, completion, continued operation or production of a well or wells for unitized substances on the unit area shall be construed and considered as the commencement, completion, continued operation or production on each of the leasehold interests committed to this agreement and operations or production pursuant to this agreement shall be deemed to be operations upon and production from each leasehold interest committed hereto, and there

shall be no obligation on the part of the unit operator or any of the owners of the respective leasehold interests committed hereto to drill offsets to wells as between the leasehold interests committed to this agreement, except as provided in Section 9 hereof.

Any lease embracing lands of the State of New Mexico of which only a portion is committed hereto shall be segregated as to the portion committed and as to the portion not committed and the terms of such leases shall apply separately as to two separate leases as to such segregated portions, commencing as of the effective date hereof. Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced within the unitized area and committed to this agreement, in accordance with the terms of this agreement. If oil and gas, or either of them, are discovered and are being produced in paying quantities from some part of the lands embraced in such lease which part is committed to this agreement at the expiration of the secondary term of such lease, such production shall not be considered as production from lands embraced in such lease which are not within the unitized area, and which are not committed thereto, and drilling or reworking operations upon some part of the lands embraced within the unitized area and committed to this agreement shall be considered as drilling and reworking operations only as to lands embraced within the unit agreement and not as to lands embraced within the lease and not committed to this unit agreement; provided, however, as to any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto upon which oil and gas or either of them has been discovered or is discovered upon that portion of such lands not committed to this agreement, and are being produced in paying quantities prior to the expiration of the primary term of such lease, such production in paying quantities shall serve to continue such lease in full force and effect in accordance with its terms as to all of the lands embraced in said lease.

14. CONSERVATION:

Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State laws or regulations.

15. DRAINAGE:

In the event a well or wells producing oil or gas in paying quantities should be brought in on land adjacent to the unit area, draining unitized substances from the lands embraced therein, unit operator shall drill such offset well or wells as a reasonably prudent operator would drill under the same or similar circumstances.

16. COVENANTS RUN WITH LAND:

The covenants herein shall be construed to be covenants running with the land with respect to the interests of the parties hereto and their successors in interest until this agreement terminates; and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer or any working, royalty or other interest subject hereto shall be binding upon unit operator until the first day of the calendar month after the unit operator is furnished with the original, photostatic or certified copy of the instrument of transfer.

17. EFFECTIVE DATE AND TERM:

This agreement shall become effective upon approval by the Commissioner and shall terminate in five years after such date unless (a) such date of expiration is extended by the Commissioner, or (b) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof; in which case, this agreement shall remain in effect so long as unitized substances are being produced from the unitized land and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can



be produced as aforesaid. This agreement may be terminated at any time by not less than seventy-five percent (75%) on an acreage basis of the owners of the working interests signatory hereto with the approval of the Commissioner. Likewise, the failure to comply with the drilling requirements of Section 8 hereof may subject this agreement to termination as provided in said section.

18. RATE OF PRODUCTION:

All production and the disposal thereof shall be in conformity with allocations, allotments and quotas made or fixed by the Commission and in conformity with all applicable laws and lawful regulations.

19. APPEARANCES:

Unit operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Commissioner of Public Lands and the New Mexico Oil Conservation Commission, and to appeal from orders issued under the regulations of the Commissioner or Commission or to apply for relief from any of said regulations or in any proceedings on its own behalf relative to operations pending before the Commissioner or Commission; provided, however, that any other interest party shall also have the right at his own expense to appear and to participate in any such proceeding.

20. NOTICES:

All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and sent by postpaid registered mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to

23. SUBSEQUENT JOINDER:

Any oil or gas interest in lands within the unit area not committed hereto prior to the submission of this agreement for final approval by the Commissioner may be committed hereto by the owner or owners of such rights subscribing or consenting to this agreement or executing a ratification thereof; and, if such owner is also a working interest owner, by subscribing to the operating agreement providing for the allocation of costs of exploration, development and operation. A subsequent joinder shall be effective as of the first day of the month following the approval by the Commissioner and the filing with the Commission of duly executed counterparts of the instrument or instruments committing the interest of such owner to this agreement; but such joining party or parties, before participating in any benefits hereunder, shall be required to assume and pay to unit operator their proportionate share of the unit expense incurred prior to such party's or parties' joinder in the unit agreement, and the unit operator shall make appropriate adjustments caused by such joinder without any retroactive adjustment of revenue.

24. COUNTERPARTS:

This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties or may be ratified or consented to by separate instrument in writing specifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described unit area.

IN WITNESS WHEREOF, the undersigned parties hereto

have caused this agreement to be executed as of the respective  
dates set forth opposite their signatures.

UNIT OPERATOR:

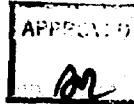
AMOCO PRODUCTION COMPANY

FEB 7 1974

Date

By

*[Signature]*  
Its Attorney-in-Fact



P. O. Box 3092  
Houston, Texas 77001

WORKING INTEREST OWNERS:

Mesa Petroleum Co.  
Attention: Mr. Bob Northington  
904 ~~Gihls~~ Tower West  
Midland, Texas 79701

Ralph Lowe Estate  
P. O. Box 832  
Midland, Texas 79701

Erma Lowe  
c/o Mr. A. W. Moursund  
P. O. Box 1  
Round Mountain, Texas 78663

Gulf Oil Corporation  
Attention: Mr. Joe Mathers  
P. O. Box 1150  
Midland, Texas 79701

Amerada-Hess Corporation  
Attention: Mr. Charles Stanford  
P. O. Box 2040  
Tulsa, Oklahoma

J. C. Barnes  
P. O. Box 505  
Midland, Texas 79701

Allied Chemical Company  
Attention: Mr. Paul Ferguson  
1300 Wilco Building  
Midland, Texas 79701

Aztec Oil & Gas Company  
Attention: Mr. Kenneth Swanson  
2000 First National Bank Building  
Dallas, Texas 75202

HNG Oil Company  
P. O. Box 767  
Midland, Texas 79701

BTA Oil Producers  
Attention: Mr. Barry Beal  
104 South Pecos  
Midland, Texas 79701

Cities Service Oil Company  
Attention: Mr. Frank Riney  
800 Vaughn Building  
Midland, Texas 79701

R. E. Lawson, Jr.  
Chancellor Building  
Midland, Texas 79701

Getty Oil Company  
Attention: Mr. Clayton Powell  
P. O. Box 1231  
Midland, Texas 79701

Pennzoil United, Inc.  
Attention: Mr. Buddy Davidson  
P. O. Box 1828  
Midland, Texas 79701

THE STATE OF TEXAS |

COUNTY OF HARRIS |

The foregoing instrument was acknowledged before me this  
7<sup>th</sup> day of February, 1974, by C. N. MENNINGER,  
as Attorney-in-Fact on behalf of AMOCO PRODUCTION COMPANY.

Irene Haldas  
Notary Public in and for Harris  
County, Texas

IRENE HALDAS  
Notary Public in and for Harris County, Texas  
My Commission Expires 6-1-75

TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE		BASIC ROYALTY AND OWNERSHIP PERCENTAGE		LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE		WORKING INTEREST AND OWNERSHIP PERCENTAGE	
9	Sec. 29: NE/4	160	K-4414 9-15-74	State 12.5%		Gulf Oil Corp.	None			Gulf Oil Corp.	100%
10	Sec. 34: SE/4SW/4	40	K-4415 9-15-74	State 12.5%		Gulf Oil Corp.	None			Gulf Oil Corp.	100%
11	Sec. 34: E/2	320	K-4603 12-15-74	State 12.5%		Ralph Lowe Est.	None			Ralph Lowe Estate Erma Lowe	50% 50%
12	Sec. 22: SE/4 Sec. 27: SE/4	320	K-4621 12-15-74	State 12.5%		Gulf Oil Corp.	None			Gulf Oil Corp.	100%
13	Sec. 32: NE/4	160	K-4681 1-19-75	State 12.5%		Gulf Oil Corp.	None			Gulf Oil Corp.	100%
14	Sec. 22: SW/4 Sec. 27: NW/4, N/2 NE/4, SE/4NE/4	440	K-5032 5-18-75	State 12.5%		Ralph Lowe Estate	None			Ralph Lowe Estate Erma Lowe	50% 50%
15	Sec. 34: W/2NW/4, SE/4NW/4, NE/4SW/4, SW/4SW/4	200	L-1542-1 10-15-78	State 12.5%		HNG Oil Company	Royce E. Lawson, Jr. 1.5625%			HNG Oil Company	100%
16	Sec. 20: NW/4, W/2 NE/4, SE/4NE/4	280	L-1641 11-19-78	State 12.5%		Mesa Petroleum Company	None			Mesa Petroleum Co.	100%
17	Sec. 28: SW/4, W/2 SE/4	240	L-1926 12-17-78	State 12.5%		Amoco Production Co.	None			Amoco Production Co.	100%
18	Sec. 32: W/2, SE/4	480	L-1946 12-17-78	State 12.5%		Mesa Petroleum Co.	None			Mesa Petroleum Co.	100%
19	Sec. 29: S/2	320	L-3383-1 8-19-79	State 12.5%		J. C. Barnes	Royce E. Lawson, Jr. 3.125%			J. C. Barnes	100%
20	Sec. 20: S/2	320	L-5469 5-1-81	State 12.5%		Mesa Petroleum Co.	None			Mesa Petroleum Co.	100%

TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSOR OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
21	Sec. 22: NE/4	160	LG-0358 7-1-82	State 12.5%	BTA Oil Producers	None	BTA Oil Producers 100%
22	Sec. 21: S/2	320	LG-0484 8-1-82	State 12.5%	Aztec Oil and Gas	None	Aztec Oil and Gas Co. 100%
22 State Tracts: 5680 acres							
Fee Leases T22S-R35E N.M.M.P.							
23	Sec. 20: NE/4NE/4	40	9-10-75	Don E. Gridley & wife Alice F. Gridley John E. Bosserman and wife Carol Jean Bosserman 1/8 x 32.37% Merchant Livestock Co. 3/16 x 67.63%	None	Royce E. Lawson, Jr.	100%
24	Sec. 34: NE/4 NW/4	40	1-7-75	Merchant Livestock Co. 1/8 x 67.63%	None	Royce E. Lawson, Jr. 3.125%	Pennzoil United, Inc. 100%
			1-7-75	Don E. Gridley and wife Alice F. Gridley and John E. Bosserman and wife Carol Jean Bosserman 1/8x32.37%		Royce E. Lawson, Jr. 3.125%	Pennzoil United, Inc. 100%

2 Fee Tracts 80 acres

State Acreage: 5680 = 98.61  
Fee Acreage: 80 = 1.39%  
5760 100.00%

Docket No. 6-74

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 13, 1974

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE:**
- (1) Consideration of the allowable production of gas for April, 1974, from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;
  - (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for April, 1974.

**CASE 5179:** Application of HNG Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Dogie Draw Unit Area comprising 5,122 acres, more or less of State, Federal, and fee lands in Township 26 South, Range 36 East, Lea County, New Mexico.

**CASE 5180:** Application of Amoco Production Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Rock Lake Unit Area comprising 5760 acres, more or less, of State and fee lands in Township 22 South, Range 35 East, Lea County, New Mexico.

**CASE 5181:** Application of Amoco Production Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Trail Canyon Unit Area comprising 5758 acres, more or less, of State, Federal and fee lands in Township 24 South, Range 23 East, Eddy County, New Mexico.

**CASE 5182:** Application of Perry R. Bass for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 15, Township 21 South, Range 27 East, adjacent to the Burton Flats Field, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location in the W/2 of said Section 15. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 5183:** Application of Amini Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the North Vacuum Abo Pool rules, authority to drill its Pennzoil State Well No. 2 at an unorthodox location for said pool 1780 feet from the South line and 460 feet from the West line of Section 36, Township 16 South, Range 34 East, Lea County, New Mexico.
- CASE 5184:** Application of Mountain States Petroleum Corporation for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the Buffalo Valley-Pennsylvanian Pool rules, approval for an unorthodox gas well location for a well to be drilled at a point 990 feet from the South and West lines of Section 36, Township 14 South, Range 27 East, Chaves County, New Mexico.
- CASE 5185:** Application of Rice Engineering & Operating, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the open-hole and perforated interval from 8442 feet to 9150 feet in its Abo SWD Well No. 2 located in Unit C of Section 2, Township 17 South, Range 36 East, Lovington Abo Pool, Lea County, New Mexico.
- CASE 5186:** Application of Amerada Hess Corporation for an unorthodox oil well location and two non-standard oil proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the Bagley Siluro-Devonian Pool rules, the formation of two non-standard proration units in Section 35, Township 11 South, Range 33 East, Lea County, New Mexico, the first being a 40-acre unit comprising the NW/4 SE/4 to be dedicated to applicant's State BTD Well No. 2, and the second being an 80-acre unit comprising the SE/4 SW/4 and the SW/4 SE/4 to be dedicated to applicant's State BTD Well No. 1, proposed to be drilled at an unorthodox location for said pool 660 feet from the South line and 1900 feet from the East line of said Section 35.
- CASE 5187:** Application of Inexco Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying Section 17, Township 21 South, Range 26 East, Eddy County, New Mexico, adjacent to the Catclaw Draw-Morrow Gas Pool, to be dedicated to a well to be drilled at a standard location for said pool. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.



CASE 5188: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Drinkard and Blinbry production in the wellbore of its Lockhart B-1 Well No. 8 located in Unit H of Section 1, Township 22 South, Range 36 East, Lea County, New Mexico.

CASE 5189: Application of Craig Folsom for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well proposed to be drilled at a point 1340 feet from the South line and 1300 feet from the East line of Section 12, Township 13 South, Range 31 East, Caprock-Queen Pool, Chaves County, New Mexico.

CASE 5190: Application of Union Oil Company of California for pool creation and special rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool for its Pipeline Deep Unit Well No. 1 located in Unit J of Section 17, Township 19 South, Range 34 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 640-acre spacing.

CASE 5191: Application of Murphy Minerals Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water through two wells into the Grayburg-San Andres formation on its Gissler "B" lease in Sections 11 and 12, Township 17 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico.

CASE 5192: In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion for the extension of the following pools in Lea County:

Antelope Ridge-Morrow Gas Pool  
EK Yates-Seven Rivers-Queen Pool  
House-San Andres Pool  
Humble City-Atoka Pool  
North Shoe Bar-Wolfcamp Pool  
Tres Papalotes-Pennsylvanian Pool  
Wantz-Granite Wash Pool

CASE 5124: (Continued from the February 13, 1974 Examiner Hearing)

Application of Belco Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the S/2 of Section 30, Township 20 South, Range 33 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 1300 feet from the East line of said Section 30. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5140: (Continued from the February 13, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for compulsory pooling, Vada-Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Vada-Pennsylvanian Pool underlying the NW/4 of Section 24, Township 9 South, Range 33 East, Lea County, New Mexico, to be dedicated to the King Resources Sheridan Well No. 1-A located in Unit C of said Section 24. Also to be considered is designation of the applicant as operator of the NW/4 of said Section 24 and the well located thereon, provision for allocation of actual operating costs and charges for supervision, and allocation of costs for reworking said well including a 200% charge attributable to any non-consenting working interest owner's pro rata share of said workover costs, for the risk involved in said workover.

CASE 4956: (Reopened) (Continued from the February 13, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for a determination of well costs, Lea County, New Mexico. Applicant, as operator of the Sheridan Well No. 1 located in Unit M of Section 13, Township 9 South, Range 33 East, Lea County, New Mexico, to which well is dedicated the SW/4 of said Section 13, all mineral interests in the Vada-Pennsylvanian Pool thereunder having been pooled by Commission Order No. R-4560, seeks the determination of reasonable well costs attributable to applicant and to King Resources, including, but not limited to, the costs of reworking and placing said Sheridan Well No. 1 back on production and attorneys fees in connection therewith. Applicant further seeks an order assessing, as a charge for the risk involved in the reworking of the well, 120% of the pro rata share of the reasonable well costs attributable to the working interest of King Resources.

ATWOOD, MALONE, MANN & COOTER  
LAWYERS

JEFF D. ATWOOD [1883-1980]

P. O. DRAWER 700  
SECURITY NATIONAL BANK BUILDING  
ROSWELL, NEW MEXICO 88201  
[505] 622-6221

CHARLES F. MALONE  
RUSSELL D. MANN  
PAUL A. COOTER  
BOB F. TURNER  
ROBERT A. JOHNSON  
JOHN W. BASSETT  
ROBERT E. SABIN  
RUFUS E. THOMPSON  
RALPH D. SHAMAS

March 8, 1974

Mr. A. L. Porter, Jr.  
Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501

RE: Examiner Hearing March 13, 1974  
Case Nos. 5180 and 5181

Dear Mr. Porter:

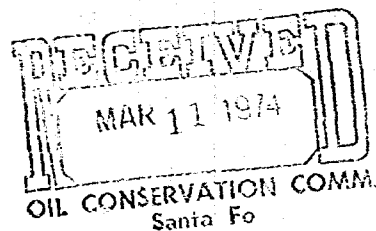
Please file the enclosed Entry of Appearances in each of the cases cited above. Thank you very much, and with best regards, I am,

Very truly yours,

*Charles F. Malone*  
Charles F. Malone

CFM:sgs  
Enclosures

cc: Guy Buell, Esquire



BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION )  
OF AMOCO PRODUCTION COMPANY, FOR )  
APPROVAL OF ROCK LAKE UNIT )  
AGREEMENT, LEA COUNTY, NEW MEXICO. )

No. 5180

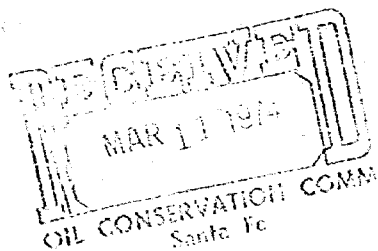
ENTRY OF APPEARANCE

The undersigned Atwood, Malone, Mann & Cooter of  
Roswell, New Mexico, hereby enter their appearance herein  
for the Applicant, Amoco Production Company, with Guy Buell,  
Esquire, of Houston, Texas.

ATWOOD, MALONE, MANN & COOTER

By

*Charles S. Malone*  
Attorneys for Amoco Production  
Company  
P. O. Drawer 700  
Roswell, New Mexico 88201





**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

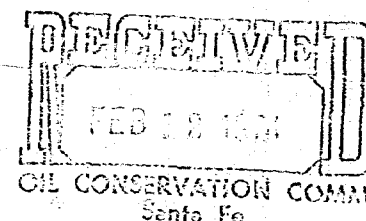
J. C. Burton  
Division Engineer

*Case No. 5180*

February 7, 1974

File: DRC-986.51NM-679

Re: Rock Lake Unit



Mr. A. L. Porter, Jr. (3)  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Sir:

Please docket a hearing at the earliest possible date to consider Amoco Production Company's application for approval of the Rock Lake Unit. The Unit area comprises 5760 acres, more or less, of State and Fee Lands all in T22S, R35E, Lea County, New Mexico. Copies of the Unit Agreement will be furnished prior to the Hearing.

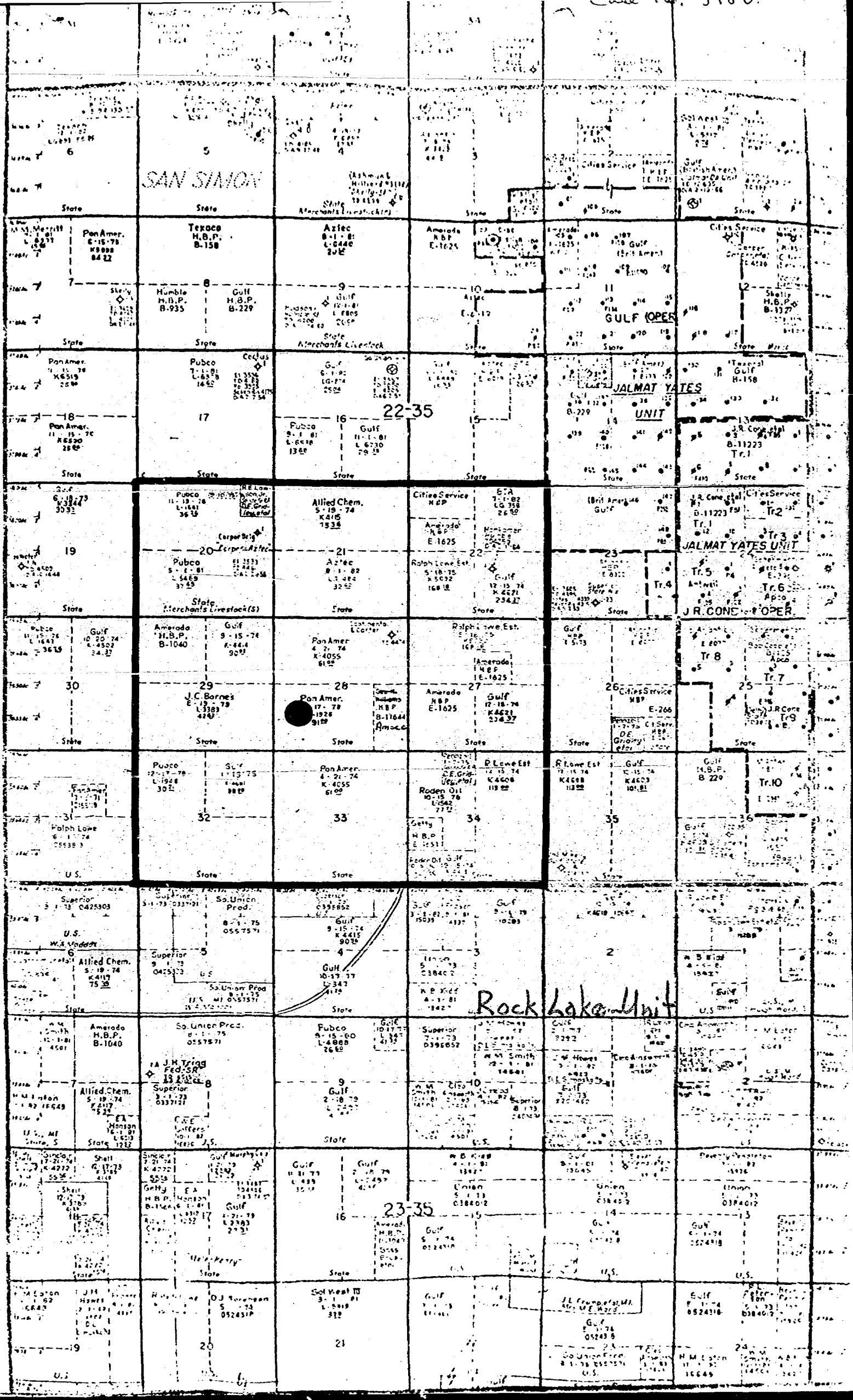
Attached is a plat showing the proposed Unit and the adjacent area.

Very truly yours,

GTB:as

Attachment

DOCKET MAILED  
Date 3-1-74



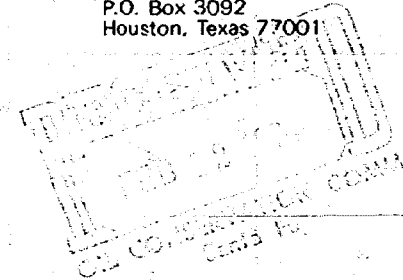
Case no. 5180



J. C. Burton  
Division Engineer

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001



February 7, 1974

File: DRC-986.51NM-679

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P. O. Box 2088  
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Attached is a plat showing the proposed Unit and the adjacent area.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. C. Burton".

GTB:as

Attachment





Case No. 5180



J. C. Burton  
Division Engineer

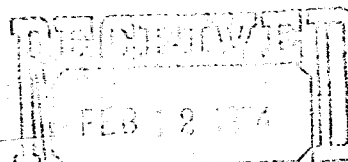
**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

February 7, 1974

File: ERC-986.51NM-679

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P. O. Box 2088  
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GTB:as

Attachment

22-35

ALMAT YATES  
UNIT

Rock Lake Unit

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE No. 5180

Order No. R-4747

APPLICATION OF AMOCO PRODUCTION COMPANY  
FOR APPROVAL OF THE ROCK LAKE  
UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
March 13, 1964, at Santa Fe, New Mexico, before Examiner  
Richard L. Stamets.

NOW, on this \_\_\_\_\_ day of March, 1964, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Amoco Production Company,  
seeks approval of the Rock Lake Unit Agreement  
covering 5,760 acres, more or less, of State and lands  
~~Federal~~ xx and Fee  
described as follows:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 22 SOUTH RANGE 35 EAST, NMPM

~~Sections 20, 21, 22, 27, 28, 29, 32,~~

~~33, 34, 35~~

Sections 20 through 22: All

Sections 27 through 29: All

Sections 32 through 34: All

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the Rock Lake Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and ~~the Director of the United States Geological Survey~~, that ~~this order~~ shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**EXAMINER HEARING**

Case No.  
5180

**TRANSCRIPT OF HEARING**

Guy Buell, Esq.  
Amoco Production Company  
Houston, Texas

I N D E X

JACK D. ANDERSON

PAGE

Direct testimony by Mr. Buell

3

KES J. GAIZUTIS

Direct testimony by Mr. Buell

8

E X H I B I T S

Marked

Admitted

Applicants Exhibits Nos.  
1, 2 and 3

--

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ANDERSON-DIRECT

CASE 5180  
Page 3

MR. STAMETS: Call the next case, 5180.

MR. CARR: Case 5180. Application of Amoco Production Company for a unit agreement, Lea County, New Mexico.

MR. STAMETS: Call for appearances in this Case.

MR. BUELL: For Amoco Production Company, my name is Guy Buell, Attorney. I'm joined in this Case, Mr. Examiner, by Charles Malone of the firm of Atwood & Malone of Roswell, New Mexico. We have two witnesses; both of these gentlemen will also testify in the next case, so will you swear them real hard so it will stick for both cases, Mr. Examiner.

MR. STAMETS: The Witnesses will be sworn both in Case 5180 and 5181.

(Witness sworn.)

JACK D. ANDERSON

called as a witness, having been first duly sworn, was examined and testified as follows:

(Whereupon, a discussion was held off the record.)

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Anderson, would you state your complete name

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0306

by whom you are employed, in what capacity, and in what location?

A My name is Jack D. Anderson, I'm employed by Amoco Production Company as a Landman in Houston, Texas.

Q Mr. Anderson, you have testified at many previous Commission hearings and your qualifications as a Landman are a matter of public record, are they not?

A Yes, they are.

Q And also, you have been involved in all the background and negotiations that have resulted in the formation of our proposed Rock Lake Unit, have you not?

A Yes, sir.

MR. BUELL: Any questions, Mr. Examiner, as to his qualifications?

MR. STAMETS: No. The Witness is qualified.

BY MR. BUELL:

Q All right, sir, Mr. Anderson, refer if you will to what has been identified as Amoco's Exhibit No. 1. What is that Exhibit?

A It is the Exhibit A to the Unit Agreement which outlines the acreage to be placed within the proposed Rock Lake Unit, which comprises 5760 acres.

Q All right, sir, it won't take long, but would



ANDERSON-DIRECT

CASE 5180

Page.....5

you describe the area included within the unit boundaries for the record please, sir.

A Yes, sir. All of the acreage is located in Township 22 South, Range 35 East, Lea County, being all of Sections 20, 21, 22, 27, 28, 29, 32, 33 and 34.

Q All right, sir. Now this Unit is composed of State and fee acreage. Have you designated the ownership categories in any way on Exhibit No. 1?

A Yes. We have shaded the fee acreage in red and the State is indicated a white, or not shaded.

Q So if I'm looking at this Exhibit right we have 80 acres total of fee acreage and the remainder of 5680 is State, is that not correct?

A Yes, that is correct.

Q All right, sir. What is the status of commitment to this Unit with respect to the working interest, Mr. Anderson?

A We have verbal commitments from all of the working-interest owners, which is approximately 13 different working-interest owners. We have verbal commitments from all of them, with the exception of 2. That would be Tract No. 2, the working interest is owned by Getty Oil Company, and Tract No. 24, the working-interest owner is

you describe the area included within the unit boundaries for the record please, sir.

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Pennzoil.

Q 40 acres of State acreage and 40 acres of fee acreage that is not committed by the working-interest owners?

A That's right, it would be uncommitted to the Unit.

Q Was there any particular reason for this, Mr. Anderson?

A The small interest that they had was approximately a half of a percent, not wanting to spread that over the nine section unit.

Q All right, sir, now what is the status of commitment with respect to the royalty owners? Let's take first the State?

A We have received from the Commissioner a letter dated February 15th, 1974, where they have approved this Unit as to form and content.

Q All right, sir, is that the usual preliminary approval which you get from the State?

A Yes, sir.

Q Let me ask you this, with the ownership that we have committed as of this time, does it appear to you that we'll have effective control over the operations in this

Unit?

A Yes, sir, we will. We'll have 98.6 percent.

Q 98.6 percent. You mentioned that the State had approved the form and content of the Unit Agreement. In that connection, would you look now at what has been identified as our Exhibit No. 2. What is that Exhibit?

A That is the Unit Agreement.

Q Is it in more or less usual, or standard form?

A Yes, sir. It was furnished to us by the Land Commissioner's Office to be used as a model.

Q You could almost call it "State form," then, couldn't you?

A I believe you could.

Q All right, sir, let me jump back to Exhibit No. 1. Have you identified the approximate location of the test well that is to be drilled on this Unit?

A Yes, it is identified by a red dot. The footage location would be 1980 feet from the south, 660 feet from the west of Section 28, Township 22 South, Range 35 East.

Q Mr. Anderson, I can't recall a single time that we have presented a unit agreement of this type to the Examiner that we haven't been in a bind timewise. Is this particular Unit an exception?

ANDERSON-DIRECT  
GAIZUTIS-DIRECT

CASE 5180  
Page.....8

A No, sir, this is not an exception.

Q What is your problem here, Mr. Anderson?

A We have leases expiring April 21st, 1974.

Q Are you urging and pleading with the Examiner to handle Commission consideration of this Application as expeditiously and in their usual efficient manner?

A Yes, in their usual efficient manner.

Q Do you have anything else you care to add at this time, Mr. Anderson?

A No, I believe that will take care of it.

MR. BUELL: If it please the Examiner, that's all we have by way of direct of Mr. Anderson in this particular case.

MR. STAMETS: Are there any questions of this Witness? He may be excused.

(Whereupon, a discussion was held off the record.)

KES J. GAIZUTIS

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Gaizutis, would you state your complete name

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

for the record, by whom you're employed, in what location and in what capacity?

A My name is Kes J. Gaizutis, I employed with Amoco Production Company in Houston as a Geologist.

Q Mr. Gaizutis, you have testified at previous Commission hearings and your qualifications as a Geologist are a matter of public record, are they not?

A Yes, sir.

Q All right, sir. In connection with your testimony let's look at what has been identified as Amoco's Exhibit No. 3. What is that Exhibit Mr. Gaizutis?

A It is a combination of the stratigraphic cross section labeled A-a' and an index map showing the general location of the cross section and the proposed Unit.

Q All right, sir. Let's discuss first the data that are reflected on your insert map located on the lower left-hand portion of your Exhibit. From the standpoint of overall area, about how big is the area that you have mapped there?

A We're talking about a 5-by-7-square mile, a 5 mile by 7 mile.

Q Could the Examiner get an idea of size if you --

A (Interrupting) That's not correct, we're talking about 5 townships by 7 townships.

Q You have identified our proposed unit on that Exhibit, haven't you?

A Yes, it is outlined in red.

Q And it's over 5000 acres?

A Yes.

Q So, that gives me some idea of the overall area that you included on your map. What else have you shown on that insert map, Mr. Gaizutis?

A The insert map is mostly a structure map, contoured on top of the Atoka. The reason for using that is for the regional sense. This is an adequate contouring horizon and it also depicts the Morrow as well as the Atoka and Bell Lake production in the area. The index also shows the cross section A' going from the north to the south through critical wells in the area and virtually controlling the area that has penetrated the Morrow.

Q All right, sir. When we look at your regional geology of the Atoka, what does it reveal to us in the particular area of our proposed Rock Lake Unit?

A Structurally there is little control, but we infer from our control to the immediate west that there

GAIZUTIS-DIRECT

CASE 5180

Page 11

is a relatively north south orientation of the structure in the area. We feel that there is a similar nosing through our proposed Unit.

Q What is the primary objection of our test well, Mr. Gaizutis?

A The primary objective is the Morrow clastic section.

Q Is structure extremely or critically important when you are looking for the Morrow?

A We feel that, although in some instances in this area structure does play a significant role in enhancing your hydrocarbon volume, we have had experience in the area that indicates that the stratigraphic nature and the quality of the sands is more critical.

Q Do you have a pretty good example right there on that Exhibit close to the surface trace of your cross section?

A Yes, immediately north of No. 4 on our cross section is the newly completed well, the Ojochito, that was drilled by Brunson and McKnight immediately off-setting a well that tested water and some gas and completed for 15,000,000. This well was drilled after the Exhibit was prepared and in fact falls structurally a little lower



than is indicated so that structurally it was not in as beneficial a position and it did make a very adequate well.

Q Adequate, or would you say an excellent Morrow well?

A I believe that 15,000,000 calculated would be a --

Q (Interrupting) All right, sir, do you have any other comments now on your insert map before we move up to your stratigraphic or correlative section of the upper portion of the Exhibit?

A The only thing that I want to point out is that the contours on the immediate east terminate at what is the approximate location of the Central Basin Platform where the Atoka-Morrow clastic section is absent.

Q All right, then let's go up to your stratigraphic section or correlative section and explain what you have shown on that portion of your Exhibit 3?

A The cross section is a stratigraphic one, primarily to depict the presence or absence of sands in the subjective interval, which would be what we consider the middle Morrow or would be the Morrow clastic section. The section is hung on top of the middle Morrow and it

indicates the proposed location between No. 3 and 4 on the cross section. The well Phillips Merchant, described as No. 4 on our cross section, shows very good sand development, indicates on a DST some 6000 feet of gas in the pipe plus a considerable amount of salt water. This is the well that was off-set by the recent Ojochito discovery. Immediately to the left on the cross section, the Gulf No. 1, deep, No. 3 on the Exhibit indicates the presence of the Morrow section that has not been eroded or is not affected by the Central Basin Platform, however the sands are not of the same quality or calibre. We feel that a proposed location between these two would catch the Morrow clastic sands in a favorable position. There is not much control in that area to lead us to believe one or the other, but we feel that we are far enough away from the Central Basin Platform to still have an adequate section.

Q So, based on all the geological data that you have been able to evaluate and examine, do you feel that the location of our proposed test well on this Unit is a good Morrow prospect?

A Yes, I do.

Q What will be the total depth of our proposed test well?

GAIZUTIS-DIRECT

Page..... 14

A The total depth is 13,500 feet. This would test the entire Morrow section and the TD and the Barnett Mississippi shale.

Q Mr. Gaizutis, do you have anything else that you would care to add to the record at this particular time?

A I just want to indicate while we discuss the Morrow as being our primary objective, the Atoka clastic and carbonate sections are also productive, very prolific in the area, as well as Wolfcamp and shallow horizon.

MR. BUELL: May it please the Examiner, that is all we have by way of direct of Mr. Gaizutis at this time. I would like to formally offer Amoco's Exhibits 1, 2 and 3.

MR. STAMETS: Amoco's Exhibits 1, 2 and 3 will be admitted into evidence.

(Whereupon Applicant's Exhibits 1, 2 and 3 were entered into evidence.)

MR. STAMETS: Are there any questions of this Witness? If not he may be excused. Is there anything further in this case?

MR. BUELL: Nothing further, Mr. Examiner.

MR. STAMETS: We will take the case under advisement.

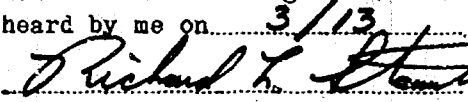
CASE 5180

Page.....15.....

STATE OF NEW MEXICO     )  
                                  ) SS.  
COUNTY OF SANTA FE     )

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

  
RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5180, heard by me on 3/13, 1974.  
, Examiner  
New Mexico Oil Conservation Commission

**EXAMINER HEARING**

Case No.  
5180

**TRANSCRIPT OF HEARING**

Guy Buell, Esq.  
Amoco Production Company  
Houston, Texas

CASE 5180

Page.....<sup>2</sup>

I N D E X

JACK D. ANDERSON

PAGE

Direct testimony by Mr. Buell

3

KES J. GAIZUTIS

Direct testimony by Mr. Buell

8

E X H I B I T S

Marked

Admitted

Applicants Exhibits Nos.  
1, 2 and 3

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14

ANDERSON-DIRECT

CASE 5180  
Page.....3

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MR. CARR: Case 5180. Application of Amoco Production Company for a unit agreement, Lea County, New Mexico.

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ANDERSON-DIRECT

CASE 5180

Page 4

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Q Mr. Anderson, you have testified at many previous Commission hearings and your qualifications as a Landman are a matter of public record, are they not?

A Yes, they are.

Q And also, you have been involved in all the background and negotiations that have resulted in the formation of our proposed Rock Lake Unit, have you not?

A Yes, sir.

MR. BUELL: Any questions, Mr. Examiner, as to his qualifications?

MR. STAMETS: No. The Witness is qualified.

BY MR. BUELL:

Q All right, sir, Mr. Anderson, refer if you will to what has been identified as Amoco's Exhibit No. 1. What is that Exhibit?

A It is the Exhibit A to the Unit Agreement which outlines the acreage to be placed within the proposed Rock Lake Unit, which comprises 5760 acres.

Q All right, sir, it won't take long, but would



ANDERSON-DIRECT

CASE 5180

Page.....5

you describe the area included within the unit boundaries for the record please, sir.

A Yes, sir. All of the acreage is located in Township 22 South, Range 35 East, Lea County, being all of Sections 20, 21, 22, 27, 28, 29, 32, 33 and 34.

Q All right, sir. Now this Unit is composed of State and fee acreage. Have you designated the ownership categories in any way on Exhibit No. 1?

A Yes. We have shaded the fee acreage in red and the State is indicated a white, or not shaded.

Q So if I'm looking at this Exhibit right we have 80 acres total of fee acreage and the remainder of 5680 is State, is that not correct?

A Yes, that is correct.

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ANDERSON-DIRECT

CASE 5180

Page.....6.....

Pennzoil.

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Unit?

A Yes, sir, we will. We'll have 98.6 percent.

Q 98.6 percent. You mentioned that the State had approved the form and content of the Unit Agreement. In that connection, would you look now at what has been identified as our Exhibit No. 2. What is that Exhibit?

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ANDERSON-DIRECT  
GAIZUTIS-DIRECT

CASE 5180  
Page.....8

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Q What is your problem here, Mr. Anderson?

A We have leases expiring April 21st, 1974.

Q Are you urging and pleading with the Examiner to handle Commission consideration of this Application as expeditiously and in their usual efficient manner?

A Yes, in their usual efficient manner.

Q Do you have anything else you care to add at this time, Mr. Anderson?

A No, I believe that will take care of it.

MR. BUELL: If it please the Examiner, that's all we have by way of direct of Mr. Anderson in this particular case.

MR. STAMETS: Are there any questions of this Witness? He may be excused.

(Whereupon, a discussion was held off the record.)

KES J. GAIZUTIS

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Gaizutis, would you state your complete name

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for the record, by whom you're employed, in what location and in what capacity?

A My name is Kes J. Gaizutis, I employed with Amoco Production Company in Houston as a Geologist.

Q Mr. Gaizutis, you have testified at previous Commission hearings and your qualifications as a Geologist are a matter of public record, are they not?

A Yes, sir.

Q All right, sir. In connection with your testimony let's look at what has been identified as Amoco's Exhibit No. 3. What is that Exhibit Mr. Gaizutis?

A It is a combination of the stratigraphic cross section labeled A-a' and an index map showing the general location of the cross section and the proposed Unit.

Q All right, sir. Let's discuss first the data that are reflected on your insert map located on the lower left-hand portion of your Exhibit. From the standpoint of overall area, about how big is the area that you have mapped there?

A We're talking about a 5-by-7-square mile; a 5 mile by 7 mile.

Q Could the Examiner get an idea of size if you --

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A (Interrupting) That's not correct, we're talking about 5 townships by 7 townships.

Q You have identified our proposed unit on that Exhibit, haven't you?

A Yes, it is outlined in red.

Q And it's over 5000 acres?

A Yes.

Q So, that gives me some idea of the overall area that you included on your map. What else have you shown on that insert map, Mr. Gaizutis?

A The insert map is mostly a structure map, contoured on top of the Atoka. The reason for using that is for the regional sense. This is an adequate contouring horizon and it also depicts the Morrow as well as the Atoka and Bell Lake production in the area. The index also shows the cross section A' going from the north to the south through critical wells in the area and virtually controlling the area that has penetrated the Morrow.

Q All right, sir. When we look at your regional geology of the Atoka, what does it reveal to us in the particular area of our proposed Rock Lake Unit?

A Structurally there is little control, but we infer from our control to the immediate west that there

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is a relatively north south orientation of the structure in the area. We feel that there is a similar nosing through our proposed Unit.

Q What is the primary objection of our test well, Mr. Gaizutis?

A The primary objective is the Morrow clastic section.

Q Is structure extremely or critically important when you are looking for the Morrow?

A We feel that, although in some instances in this area structure does play a significant role in enhancing your hydrocarbon volume, we have had experience in the area that indicates that the stratigraphic nature and the quality of the sands is more critical.

Q Do you have a pretty good example right there on that Exhibit close to the surface trace of your cross section?

A Yes, immediately north of No. 4 on our cross section is the newly completed well, the Ojochito, that was drilled by Brunson and McKnight immediately off-setting a well that tested water and some gas and completed for 15,000,000. This well was drilled after the Exhibit was prepared and in fact falls structurally a little lower

than is indicated so that structurally it was not in as beneficial a position and it did make a very adequate well.

Q Adequate, or would you say an excellent Morrow well?

A I believe that 15,000,000 calculated would be a --

Q (Interrupting) All right, sir, do you have any other comments now on your insert map before we move up to your stratigraphic or correlative section of the upper portion of the Exhibit?

A The only thing that I want to point out is that the contours on the immediate east terminate at what is the approximate location of the Central Basin Platform where the Atoka-Morrow clastic section is absent.

Q All right, then let's go up to your stratigraphic section or correlative section and explain what you have shown on that portion of your Exhibit 3?

A The cross section is a stratigraphic one, primarily to depict the presence or absence of sands in the subjective interval, which would be what we consider the middle Morrow or would be the Morrow clastic section. The section is hung on top of the middle Morrow and it



indicates the proposed location between No. 3 and 4 on the cross section. The well Phillips Merchant, described as No. 4 on our cross section, shows very good sand development, indicates on a DST some 6000 feet of gas in the pipe plus a considerable amount of salt water. This is the well that was off-set by the recent Ojochito discovery. Immediately to the left on the cross section, the Gulf No. 1, deep, No. 3 on the Exhibit indicates the presence of the Morrow section that has not been eroded or is not affected by the Central Basin Platform, however the sands are not of the same quality or calibre. We feel that a proposed location between these two would catch the Morrow clastic sands in a favorable position. There is not much control in that area to lead us to believe one or the other, but we feel that we are far enough away from the Central Basin Platform to still have an adequate section.

Q So, based on all the geological data that you have been able to evaluate and examine, do you feel that the location of our proposed test well on this Unit is a good Morrow prospect?

A Yes, I do.

Q What will be the total depth of our proposed test well?

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A The total depth is 13,500 feet. This would test the entire Morrow section and the TD and the Barnett Mississippi shale.

Q Mr. Gaizutis, do you have anything else that you would care to add to the record at this particular time?

A I just want to indicate while we discuss the Morrow as being our primary objective, the Atoka clastic and carbonate sections are also productive, very prolific in the area, as well as Wolfcamp and shallow horizon.

MR. BUELL: May it please the Examiner, that is all we have by way of direct of Mr. Gaizutis at this time. I would like to formally offer Amoco's Exhibits 1, 2 and 3.

MR. STAMETS: Amoco's Exhibits 1, 2 and 3 will be admitted into evidence.

(Whereupon Applicant's Exhibits 1, 2 and 3 were entered into evidence.)

MR. STAMETS: Are there any questions of this Witness? If not he may be excused. Is there anything further in this case?

MR. BUELL: Nothing further, Mr. Examiner.

MR. STAMETS: We will take the case under advisement.

STATE OF NEW MEXICO     )  
                                  )     SS.  
COUNTY OF SANTA FE     )

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5786 heard by me on 3/1/3, 1974.  
*Richard L. Nye*, Examiner  
New Mexico Oil Conservation Commission

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EXHIBIT "B"  
ROCK LAKE UNIT AREA  
LEA COUNTY, NEW MEXICO

January 1, 1974

TRACT NO.	DESCRIPTION OF LAND	NO. OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE		LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE		WORKING INTEREST AND OWNERSHIP PERCENTAGE	
				PERCENTAGE	PERCENTAGE		PERCENTAGE	PERCENTAGE	PERCENTAGE	PERCENTAGE
State Leases T22S-R35E N.M.P.M.										
1	Sec. 29: NW/4	160	B-1040-1 HBP	State 12.5%		Amerada-Hess Corp.	None		Amerada-Hess Corp.	100%
2	Sec. 34: NW/4SW/4	40	B-1651-4 HBP	State 12.5%		Getty Oil Co.	None		Getty Oil Company	100%
3	Sec. 28: E/2SE/4	80	B-11644-10 HBP	State 12.5%		Amoco Production Co.	George H. Williams and wife Lois M. Williams 3.125% Gustave Krouse 3.125%		Amoco Production Co.	100%
4	Sec. 22: N/2NW/4	80	E-268-4 HBP	State 12.5%		Cities Service Oil Co.	L. A. Crancer 1.5625% Central Oil Co. 1.5625% O. H. Randel 3.125% Robert E. Boling 1%		Cities Service Oil Co.	100%
5	Sec. 22: S/2 NW/4 Sec. 27: SW/4, SW/4 NE/4	280	E-1625-1 HBP	State 12.5%		Amerada-Hess Corp.	None		Amerada-Hess Corp.	100%
6	Sec. 28: N/2	320	K-4055 4-21-74	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%
7	Sec. 33: A11	640	K-4056 4-21-74	State 12.5%		Amoco Production Co.	None		Amoco Production Co.	100%
8	Sec. 21: N/2	320	K-4115 5-19-74	State 12.5%		Allied Chemical Corp.	None		Allied Chemical Corp.	100%